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MINNESOTA Labor Market REVIEW

In This Issue:

With the release of the 1988 Salary Survey and the Consumer Price Index, it is possible to track the race between wages and price hikes. Page 1.

As 1989 opens, employment levels are generally higher than they were a year ago, but unemployment also seems to be edging upward. Page 8.

Refiguring The Unemployment Figures. A new method of calculating monthly employment and unemployment estimates means that previous year's labor force data will be revised. Month-to-month changes will be accentuated, but breaks between the December and January data will be smoothed out. Page 24.

February 1989 Quarterly

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With this issue of the "Review", we begin making changes (improvements, we trust) in the publication. We have reorganized the contents by geographic area. All national data is under THE NATION heading (except that used as a comparative backdrop for state data). State data is consolidated in the MINNESOTA section, and Metropolitan data is in its section. In future quarterly "Reviews" some esoteric seeming charts or parts of tables may be dropped, while more relevant and current data such as employment projections may be added. Readers are encouraged to voice their opinions concerning present materials they could live without, information they'd like to see added, and design or other changes.

The 26 page **Minnesota Labor Market Review** is published quarterly by the Research and Statistics Office of the Minnesota Department of Jobs and Training, 390 North Robert St., St. Paul, Minnesota 55401. The 8 page supplement is published during the other eight months. Copies are available without charge by writing the editor.

Articles on labor market conditions and the economic welfare of Minnesota workers or general economic conditions within the state are welcome. Length should not exceed 8 double-spaced typewritten pages, including graphs, references, and notes. We reserve the right to edit articles for clarity and length.

Editor: Med Chottepanda

Assistant Editor: Ron Daws

Typist: Dao Hoffman

Staff: Kevin Alaspa, Ben Boyle, Mike Casey, Sue Borgfelt, Bruce Steuernagel, Hugh Heimdahl

FEATURE ARTICLE

The Race Between Wage And Price Hikes: Who's Winning?

By Betsy Sawyer and Ron Daws

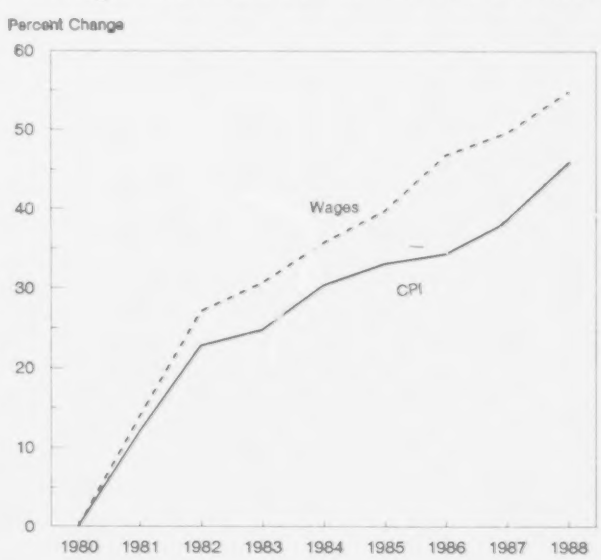
With the release of the 1988 Salary Survey, there was good news and bad news. The bad news is that comparative yearly wages for a select sample of occupations suggests that between 1970 and 1988 inflation increased faster than wages did. A comparison of 18 salary survey occupations* surveyed each year between 1970 and 1988 shows that while median wages grew by 181 percent, the cost of living as measured by the Twin Cities Consumer Price Index (CPI-W) grew by 191.6 percent. That means the purchasing power of the average wage dollar dropped six percent between 1970 and 1988.

The good news is that between 1980 and 1988, wages have grown faster than inflation. A much broader sample of 130 occupations suggests that average median wages grew by 58.4 percent while the Twin Cities CPI-W rose by 45.5 percent. Therefore, the purchasing power of the average wage increased nine percent between 1980 and 1988. Were it not for upward creeping inflation in 1987 and 1988, the gain would have been greater (during 1987 the average wage was 11 percent higher than in 1980 (Chart 1 and Table 1).

The source of state wage data, the **1988 Minnesota Salary Survey**, is published in three parts, the general survey, the hospital and nursing home survey, and by firm size and industry. The first two compare wages for occupations over time as well as across the state. Each includes median hourly wage rates (the midpoint in the distribution of wages) for a combin-

Chart 1.

Wage and Price Increases Since 1980



* For a list of these 18 occupations, see the feature article, Trends In Wages And Prices In Minnesota, 1983-1986 in the August 1986 issue of the "Review."

Table 1.

Comparison Of Minnesota Wage And Price Changes* From 1980 To 1988

	80	81	82	83	84	85	86	87	88
Average Wages	$6.52	7.36	8.14	8.59	8.96	9.29	9.70	9.89	10.33
% Change in Wages from 1980	-	12.9	24.8	31.7	37.4	42.5	48.8	51.7	58.4
% Change in CPI from 1980	-	12.0	22.8	24.8	30.4	33.1	34.3	38.3	45.5
Constant 1980 Wages	$6.52	6.57	6.63	6.88	6.87	6.98	7.22	7.15	7.10
% Change in 1980 Constant Wages Since 1980	-	4.4	1.7	5.5	5.4	7.1	10.7	9.7	8.9

* Wages measured by the Minnesota Salary Survey and Price measured by the Twin Cities Consumer Price Indes (CPI-W).

ed total of 240 occupations, as well as various percentiles along the distribution of wages. Occupations are cagegorized into five broad groups with average median hourly wage rates calculated for each group.

Between 1987 and 1988 the average wage of all occupations surveyed increased by 2.6 percent, half the rate of inflation, 5.2 percent (Table 2). Another measure, the Employment Cost Index (ECI) shows that employer wage costs went up faster than wages surveyed by the salary survey. This national index measures changes in wage costs, free from the influence of workers who change jobs and industries. The index says that employer wage costs increased 3.3 percent from March 1987 to March 1988.

Where The Big Wages Are

Wage and price hikes were not uniform across the state, however. Area wage data suggests that Twin City Metropolitan area wages were about 16 percent higher than

Table 2.

Comparison Of Wages By Occupational Group Between 1987 And 1988

Occupational Group	Median Hourly Wage		Percent Change From 1987		M-SP
	1987	1988	Salary Survey	ECI	CPI-W
Professional & Tech.	$12.44	$13.02	4.6	4.0	-
Sales	7.91	7.86	-0.7	0.6	-
Clerical	8.09	8.13	0.5	4.4	-
Service	7.53	7.79	3.6	2.4	-
Prod, Const, & Maint.	10.48	10.67	1.8	3.4	-
All Occupations	**10.28**	**10.55**	**2.6**	**3.3**	-
CPI-W Mpls-St.Paul (Av. 1988)					5.2

Greater Minnesota wages (Twin City area wages were 8.4 percent higher than the state average).

But the higher Twin City wages were mostly offset by higher living costs. According to a study by the Office of the Legislative Auditor, Minnesotans who live outside the Twin Cities pay 11 percent less for basic living expenses than do those residing in the Twin Cities. Almost all the difference is due to the higher cost of housing in the Twin Cities. Living expenses were especially low in Southwest Minnesota, and highest across a broad diagonal swath running from Rochester through the Twin Cities and up into St. Cloud.

Table 3 shows average median hourly wages for the state and six sub-areas. Also shown are wage indexes for substate areas using state wage rates as the base, as well as over-the-year percentage changes.

State salaries have traditionally been highest in the Twin City area. The highly unionized Northeast Area paid next best, while predominately agricultural western Minnesota paid the lowest wages. These relationships generally held for all occupational categories. Twin Cities area wages also increased fastest since 1987, by 3.5 percent. A 5.8 percent increase in professional and technical salaries, and a 3.7 percent jump in production, construction and maintenance salaries provided the most impetus. Conversely, wages declined by 1.1 percent in the Northwest due to a 4.0 percent decrease in production, construction and maintenance wages.

Comparative Occupational Wage Gains

Wages of professionals and technicals increased most, at 4.6 percent, while sales salaries declined slightly. While accessing sales salaries is complicated by differences in the way commissions are reported, a small drop is consistent with the ECI. The Salary Survey and the ECI clash most in the area of clerical wages, and most of this can be explained by a large decrease in the wages of order fillers and order salespersons.

Firm size also affects wages. The larger the firm, the higher the wages in any occupation (Table 4). Clerical salaries varied least between small and large companies, while service workers in large firms earned a great deal more. Wage increases between 1987 and 1988 were uniform across jobs except for firms with fewer than 50 employees where wages essentially stagnated, again due to a three percent decline in product-

Table 3.

Minnesota Wages By Geographic Area And Major Occupational Group

Area of State	Median Hourly Wage						Wage Index						Percent Change From 1987
	All Occ.	Prof/ Tech.	Sales	Cler.	Ser.	Prod/ Const/ Maint	All Occ.	Tech	Sales	Cler.	Ser.	Prod/ Const/ Maint.	
Northwest	$8.75	$10.85	$6.67	$7.00	$6.63	$8.68	83	83	85	86	85	81	-1.1
Southwest	8.79	11.07	7.22	7.34	7.44	8.31	83	85	92	90	95	78	1.7
Central	9.10	11.46	7.57	7.23	7.47	8.75	86	88	96	89	96	82	2.4
Northeast	10.52	12.95	7.87	8.17	7.69	10.66	100	100	100	100	99	100	2.0
Southeast	9.53	11.74	8.47	8.09	7.42	9.16	90	90	108	99	95	86	2.3
Twin Cities	11.36	13.88	8.20	8.30	8.37	11.78	108	107	104	102	107	110	3.5
Total State	10.55	13.02	7.86	8.13	7.79	10.67	100	100	100	100	100	100	2.6

Table 4. Minnesota Wages By Firm Size And Major Occupational Group

Size Of Firm	Median Hourly Wage						Wage Index (All Firms=100 In 1988)						Percent Change From 1987
	All Occ.	Prof/ Tech	Sales	Cler	Serv	Prod/ Const/ Maint.	All Occ.	Prof/ Tech	Sales	Cler	Serv	Prod/ Const/ Maint	
Under 50	$9.36	11.29	7.40	7.62	6.73	9.47	89	87	94	94	86	89	0.2
50-99	9.92	12.15	7.74	7.96	6.93	10.02	94	93	98	98	89	94	2.9
100-499	10.50	13.09	8.19	7.99	7.68	10.55	100	101	104	98	99	99	2.9
500+	11.81	14.25	9.18	8.56	9.16	12.12	112	110	117	105	123	114	2.5
All Firms	10.55	13.02	7.86	8.13	7.79	10.67	100	100	100	100	100	100	2.6

Table 5. Minnesota Wages By Firm Size And Major Occupational Group

Industry	Median Hourly Wage				Wage Index				Percent Change From 1987
	All Occ.	Prof/ Tech	Cler	Blue Collar	All Occ.	Prof/ Tech	Cler	Blue Collar	
Const.	$10.78	15.49	8.29	11.03	111	114	107	113	4.2
Manufact.	9.90	14.14	7.74	9.98	102	104	100	102	3.3
Tr, Com, Ut.	10.73	13.85	9.14	10.79	111	102	118	110	9.3
Trade	8.63	11.80	7.26	8.25	89	87	94	84	-2.8
Fi, Ins, R.E	9.39	13.11	7.63	9.21	97	97	99	94	4.4
Services	8.71	13.59	7.05	7.32	90	100	91	75	5.3
Government	10.73	13.74	8.54	11.98	111	102	111	122	2.0
All Indust.	9.69	13.53	7.72	9.79	100	100	100	100	3.3

ion, construction and maintenance wages.

Pick Your Industry Carefully

Only 37 surveyed occupations were common to all industries. Mining, although included in the totals, does not appear separately in Table 5 because there was insufficient data for separate disclosure. During 1988, construction and government generally paid their employees best. The transportation, communication and utilities industry also paid well, although the differences shown in Table 5 may be exaggerated because with the samples for jobs being small, the resultant estimates are unreliable.

As before, professionals received the highest salaries in the construction industry, clerical workers in transportation, communication and utilities, and blue collar workers (production, construction, maintenance and service jobs) in government. Wholesale and retail trade and services jobs paid least well. Wages in trade declined 2.8 percent from 1987. While part of this may be due to a large decrease in the wages of an occupation with a small sample size, it mirrors the decline in sales wages.

As in previous years, professionals employed in trade earned the lowest wages as did clericals and blue collar workers in services. Large numbers of low paid guards in the temporary service industry helped produce the large spread in blue collar wages among industries.

As we move into 1989 and beyond, the questions are whether wages will begin to spiral owing to forecasted labor shortages, and whether inflation will heat up as higher labor costs are passed along to consumers. If wages and prices advance together, there will be few winners. □

THE NATION

By Ben Boyle

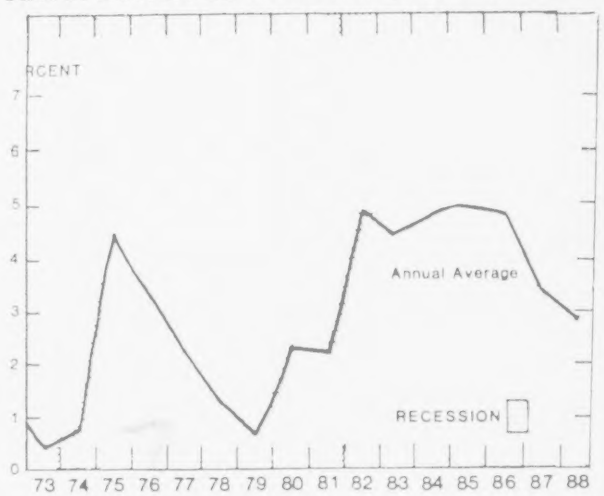
Mild Weather Contributes To Sharp Rise In Payroll Employment In January; Unemployment Rate Edges Upward

The nation's seasonally adjusted unemployment rate rose a slight 0.1 of a point to 5.4 percent in January, after an average of 5.3 percent in the fourth quarter of 1988 and 5.9 percent in the fourth quarter of 1987. In January 1988 the rate was 5.8 percent. Partly as a result of unusually warm weather, seasonally adjusted nonfarm payroll employment rose by a very strong 408,000 in January after a gain of 221,000 in December. Construction employment which had average monthly increases of 26,000 during 1988 surged by 102,000 in January. Also, the January gain of 133,000 in retail trade appears to be exaggerated. Layoffs were not as numerous as usual because holiday hiring was less than normal. Still, factory employment rose by 46,000 after an increase of 23,000 in December.

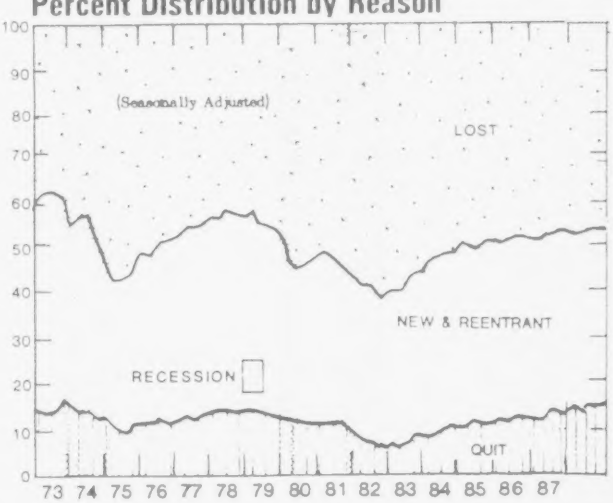
Weather Also Affects Other Measures Of Economic Activity

Mild weather boosted housing starts which jumped by 8 percent in January. The healthy gain of 0.6 percent in retail sales was also weather related. Although industrial production rose less than in December, the 0.3 percent rise in January was still satisfactory. Moreover, the capacity utilization rate of the nation's factories, mines and utilities remained at its highest mark since October 1979. Meanwhile, personal income rose by a healthy 1.8 percent during the month while personal spending increased by only 0.1 percent. However, the report on gross national product for the fourth quarter showed that consumer spending rose more than was previously estimated.

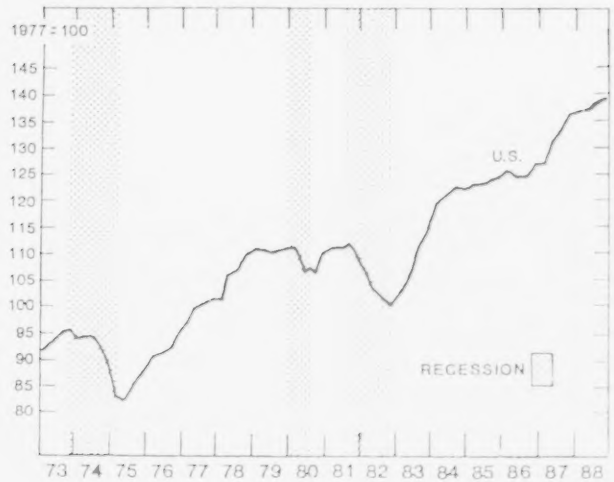
Federal Deficit as % of GNP (Current Dollars)



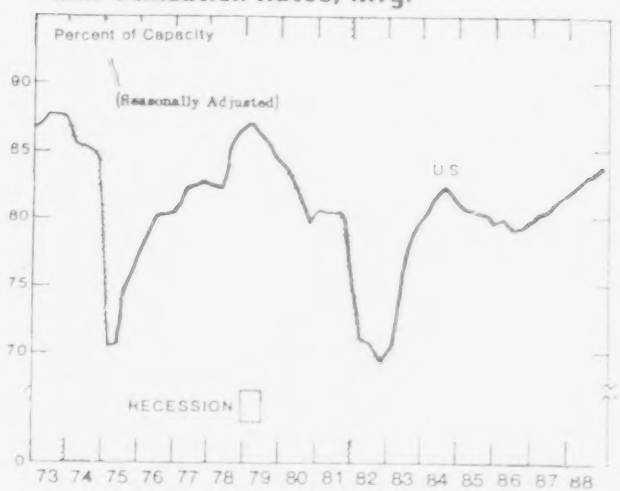
U.S. Unemployment: Percent Distribution by Reason



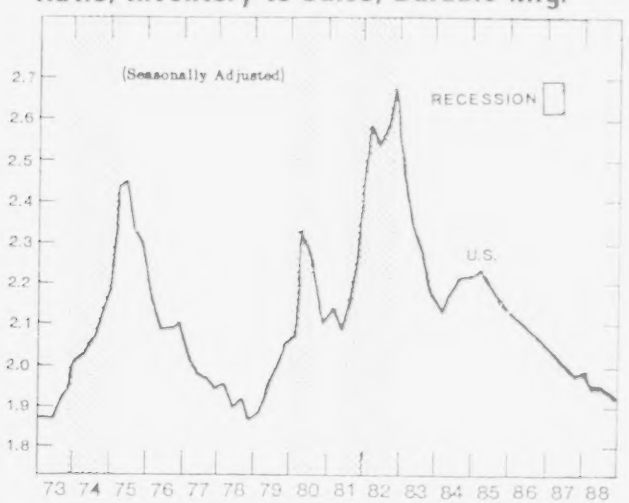
Index of Industrial Production



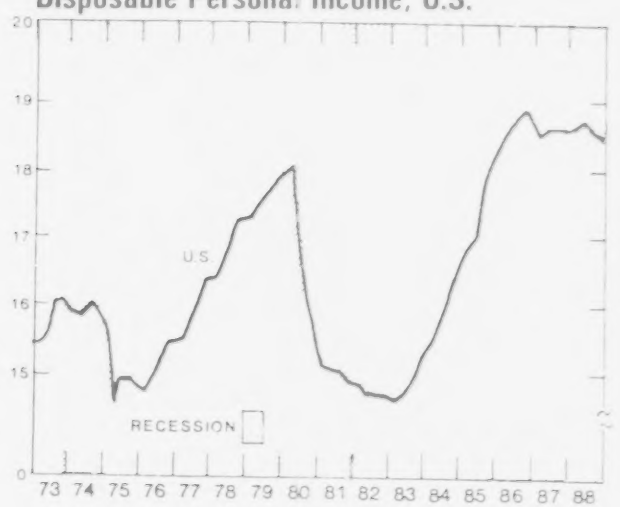
Plant Utilization Rates, Mfg.



Ratio, Inventory to Sales, Durable Mfg.



Ratio, Consumer Installment Debt to Disposable Personal Income, U.S.



National Spending, Output, Income, and Prices

Type of Economic Activity	United States		
	IV QUARTER 1988	Percent Change from	
		Last Qtr.	Year Ago
Spending and Output			
Gross National Product (in Billions of 1972 Dollars)	4,029.2	0.5	2.7
Personal Consumption Expenditures	2,621.9	0.7	3.6
Durable Goods	412.5	0.5	6.4
Nondurable Goods	908.7	0.5	2.0
Services	1,300.7	0.9	3.8
Gross Private Domestic Investment	717.1	-1.2	-1.0
Nonresidential, Fixed	490.4	-0.9	5.5
Residential, Fixed	197.4	3.0	2.4
Net Exports	-100.7	#	#
Government Purchases	750.9	2.2	-0.2
Federal	332.9	4.0	-4.3
State and Local	458.0	1.0	2.9
Current Federal Budget Surplus (Deficit)1/	-161.5	-123.5	-160.4
Current Federal Budget Surplus (Deficit) as % of GNP1/	3.2	2.5	3.4
Retail Sales (in millions of dollars)	137,465	2.2	7.7
Industrial Production (Base Year - 1977)	139.8	1.0	5.0
Housing Starts (Annualized in Thousands)	1,538	4.8	0.3
Plant Utilization Rates	84.3	0.4	2.4
New Orders - Durable Goods (in millions of dollars)	125,526	5.1	11.7
Income and Credit			
Total Personal Income (in billions of dollars)	4,185.1	2.2	7.1
Total Disposable Personal Income (in billions of dollars)	3,587.1	2.3	8.2
Per Capita Personal Income			
Current Dollars	16,327	1.9	6.1
1967 Dollars	14,067	0.9	1.7
Median Family Income - Family of Four (in dollars)	n.a.	n.a.	n.a.
Poverty Threshold for Family of Four (in dollars)	12,100	n.a.	3.9
Average Weekly Earnings of Production Workers in Mfg.	427.94	2.7	3.0
Money and Credit			
Money Supply (M2) (in billions of dollars)	3,053.3	0.8	5.4
Federal Reserve Discount Rate	6.50	3.3	8.3
Prime Rate Charged by Banks	10.18	4.8	14.8
Consumer Installment Credit as % of Disp. Pers. Income	18.5	-0.6	0.4
Prices			
Consumer Price Index (All Urban Consumers)	120.3	1.0	4.2
Food	129.4	0.8	5.2
Housing	120.0	0.4	3.9
Apparel	119.5	4.5	4.4
Transportation	110.5	1.0	2.8
Medical Care	141.8	1.4	6.9
Personal Care	121.7	1.8	4.6
Producer Price Index	108.5	0.5	4.1
Finished Goods	107.9	0.7	3.5
Raw Materials	96.2	-0.9	1.1

Percent change not applicable
1/ Represents values - not percent change.

MINNESOTA

By Ben Boyle

January Rise In Unemployment Rate Is Close To Normal Seasonal Increase

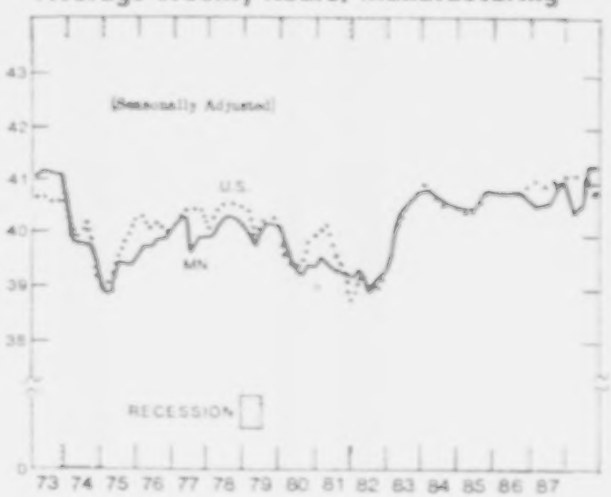
The state's seasonally unadjusted unemployment rate rose a full percentage point to 5.1 percent in January from 4.1 percent in December. The rate had averaged 3.6 percent in the fourth quarter of 1988, down from 4.5 percent in the fourth quarter of 1987. In January 1988 the rate was 4.9 percent.

Nonfarm Wage And Salary Employment Shows Little Change In January; Annual Average Growth In 1988 Is Only Slightly Less Than In 1987

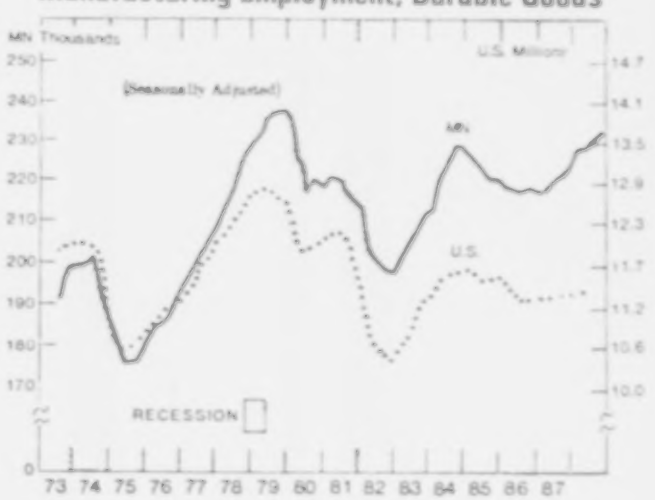
Because newly revised seasonally adjusted data were not available, it was necessary to estimate the seasonally adjusted changes in nonfarm wage and employment. Total nonfarm wage and salary employment in January appeared to have remained close to the December level and was 60,200 or 3.1 percent above the total of a year ago. The biggest over-the-month growth took place in the finance, insurance and real estate industry division, particularly in insurance. Employment in manufacturing also appears to have increased in January inasmuch as the December to January decline was considerably less than the average drop of the past four years between these two months. Local government employment fell more than usual in January.

Recently revised annual average figures show that total nonfarm wage and salary employment increased by 3.3 percent in 1988 after a gain of 3.5 percent in 1987. In 1986 wage and salary employment rose by only 1.5 percent. Although mining had the largest growth in percentage terms (14.9%), it only added 900 jobs. Employment in durable goods manufacturing increased much faster than in 1987.

Average Weekly Hours, Manufacturing



Manufacturing Employment, Durable Goods

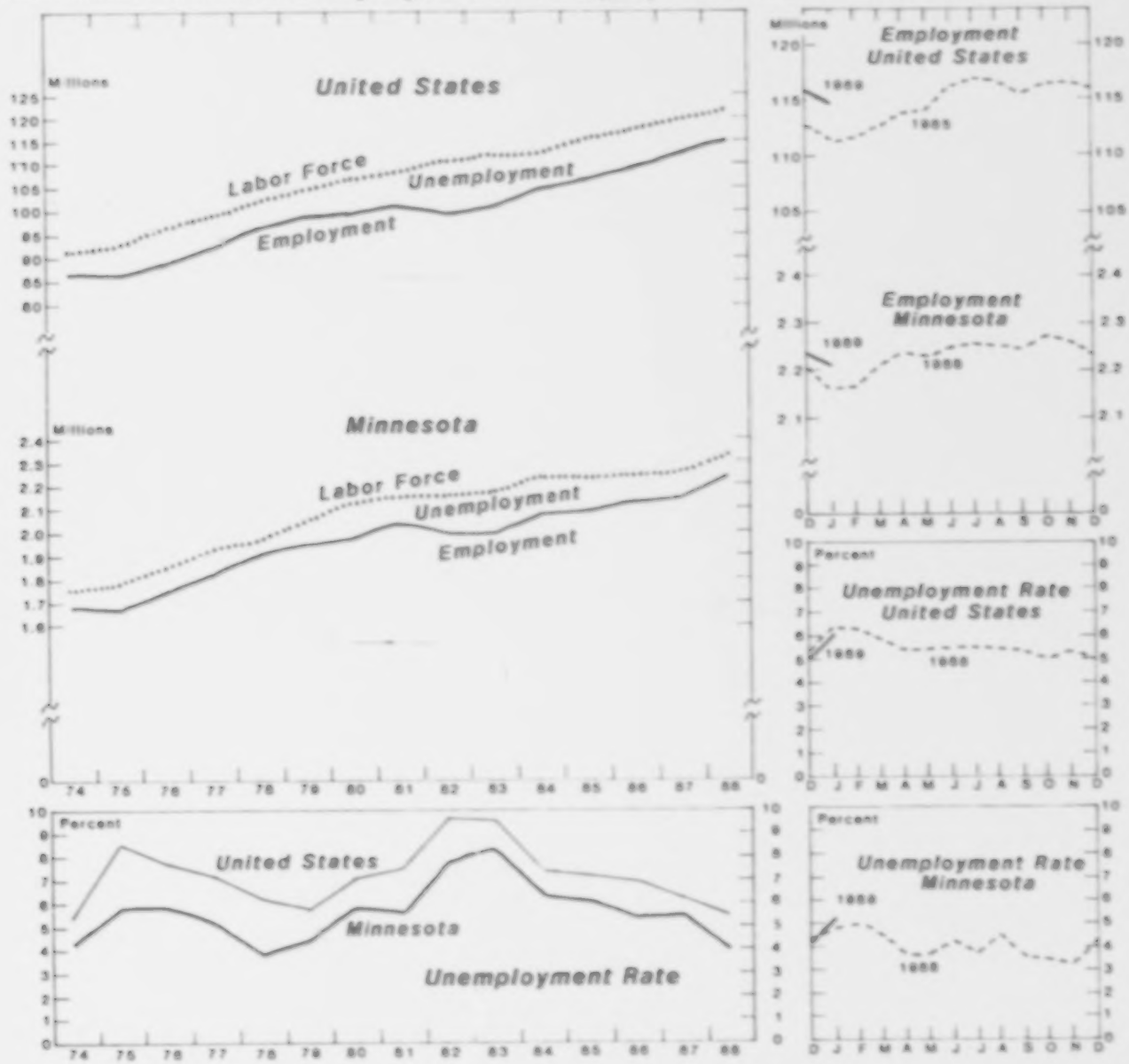


Labor Force Estimates

	MINNESOTA (Numbers in Thousands)			UNITED STATES (Numbers in Millions)		
	January 1989	Change From		January 1989	Change From	
		Last Mo.	Year Ago		Last Mo.	Year Ago
Civilian Labor Force	2,323.1	-7.2	45.1	122.1	0.0	2.4
Employed	2,204.2	-29.6	37.3	114.8	-1.2	2.6
Unemployed	118.9	22.4	7.9	7.3	1.2	-0.3
Unemployment Rate						
Actual	5.1	1.0	0.2	6.0	1.0	-0.3
Seasonally Adjusted	n.a.	n.a.	n.a.	5.4	0.1	-0.4

* Components may not add to Civilian Labor Force due to rounding.

U.S. And Minnesota Employment, Unemployment And Unemployment Rate



Quarterly U.S. and Minnesota Labor Force and Industry Data

	MINNESOTA (Numbers in Thousands)			UNITED STATES (Numbers in Thousands)		
	IV QTR 1988	Percent Change from		IV QTR 1988	Percent Change from	
		Last Qtr.	Year Ago		Last Qtr.	Year Ago
Labor Force Estimates						
Total Labor Force						
Actual	2,344.1	-0.1	2.4	122,397	-0.5	1.6
Seasonally Adjusted	n.a.	n.a.	n.a.	122,388	0.4	1.5
Employment						
Actual	2,260.1	0.3	3.3	116,181	-0.2	2.1
Seasonally Adjusted	n.a.	n.a.	n.a.	115,843	0.6	2.1
Unemployment						
Actual	84.0	-10.0	-17.6	6,216	-6.1	-7.6
Seasonally Adjusted	n.a.	n.a.	n.a.	6,545	-2.0	-7.5
Unemployment Rates						
Actual	3.6	-10.0	-20.0	5.1	-5.6	-8.9
Seasonally Adjusted	n.a.	n.a.	n.a.	5.3	-3.6	-10.2
Other Rates of Labor Utilization						
Participation Rt. (Labor Force/Population (16+)	n.a.	n.a.	n.a.	62.5	0.3	1.0
Full Employment Deficit - Percent of Workers1/	-0.4	0.0	0.5	1.1	1.4	1.6
Manpower Utilization Rate2/	84.0	-0.3	-0.3	84.1	0.2	0.6
Nonagricultural Wage & Salary Positions						
Employment (Seasonally adjusted)	2,047.2	1.1	3.1	107,335	0.8	3.5
Mining	7.7	10.8	8.5	724	-1.9	-1.8
Construction	77.4	-0.7	-5.7	5,396	1.0	6.0
Manufacturing	391.8	0.7	3.2	19,706	0.7	2.2
Durables	233.5	0.7	3.9	11,634	0.7	2.5
Nondurables	158.3	0.8	2.1	8,072	0.7	1.7
Trans., Comm., & Public Utilities	102.8	0.6	1.6	5,643	0.6	3.3
Trade	513.3	1.5	4.1	25,659	0.7	3.8
Fin., Ins., & Real Estate	123.6	-0.2	1.8	6,722	0.5	1.7
Services	504.8	1.3	4.3	25,943	1.1	5.4
Government	325.7	1.2	2.5	17,542	0.8	2.2
Average Weekly Hours (Seasonally adjusted)						
Mining	43.5	0.0	-0.7	42.2	0.0	-1.6
Construction	38.4	-0.5	-1.0	38.0	-1.3	0.5
Manufacturing	40.9	-1.0	-0.2	41.1	0.0	0.0
Durables	41.9	-0.9	-1.2	41.8	0.0	0.2
Nondurables	39.7	-0.5	1.0	40.1	-0.2	-0.5
Trans., Comm., & Public Utilities	35.1	-0.8	-5.1	39.4	0.0	0.5
Trade	29.2	-0.7	-0.7	31.2	-0.3	-0.3
Fin., Ins., & Real Estate	n.a.	n.a.	n.a.	35.8	-0.3	-1.1
Services	n.a.	n.a.	n.a.	32.6	0.0	0.0
Average Hourly Wage						
Mining	13.17	1.2	2.6	12.79	0.9	2.2
Construction	15.80	2.1	2.1	13.11	0.8	2.3
Manufacturing	10.65	1.3	2.2	10.30	1.2	2.9
Durables	10.92	0.4	1.9	10.85	1.4	2.9
Nondurables	10.28	2.6	2.7	9.53	0.8	2.9
Trans., Comm., & Public Utilities	12.69	0.6	0.6	12.47	0.9	2.3
Trade	7.82	0.3	0.3	7.42	1.5	4.1
Fin., Ins., & Real Estate	n.a.	n.a.	n.a.	9.28	2.3	5.2
Services	n.a.	n.a.	n.a.	9.10	2.8	4.8

1/ Four percent is a generally agreed upon criteria for measuring full employment. It allows for the movement of persons between jobs. Labor Force Unemployment Rate less four percent, based on official estimates.

2/ Estimated worker hours expended in nonfarm payroll employment as a percent of potential worker hours assuming that each member of the nonfarm labor payroll labor force was employed at a standard rate of 40 hours per week.

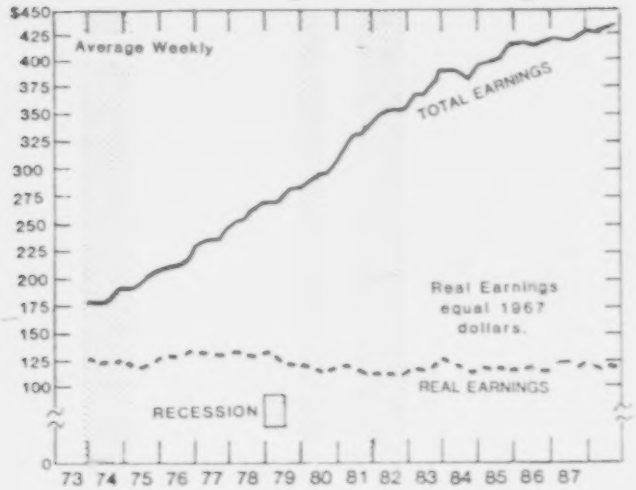
Minnesota Nonfarm Wage & Salary Employment, Hours & Earnings

INDUSTRY	EMPLOYMENT1/ (thousands)			PERCENT CHANGE FROM		PRODUCTION WORKERS' HOURS & EARNINGS2/					
						Average Weekly Earnings		Av. Hourly Earnings		Average Weekly Hrs.	
	Jan. 1989	Dec. 1988	Jan. 1988	Dec. 1988	Jan. 1988	Jan. 1989	Jan. 1988	Jan. 1989	Jan. 1988	Jan. 1989	Jan. 1988
Total Nonagricultural	**2,011.4**	**2,059.2**	**1,951.2**	**-2.3**	**3.1**	-	-	-	-	-	-
Manufacturing	**393.9**	**396.4**	**379.7**	**-0.6**	**3.7**	**427.05**	**423.39**	**10.73**	**10.48**	**39.8**	**40.4**
Durable Goods	237.4	238.2	227.7	-0.4	4.3	439.67	441.25	10.91	10.71	40.3	41.2
Lumber and Furniture	22.5	22.1	20.7	1.8	8.4	441.96	430.50	11.60	11.48	38.1	37.5
Stone, Clay and Glass	7.6	8.2	7.3	-8.2	4.1	427.73	405.20	10.72	10.13	39.9	40.0
Primary Metals	7.4	7.4	6.7	0.0	10.7	426.86	404.20	9.95	9.40	42.9	43.0
Fabricated Metals	34.0	34.3	34.1	-0.9	-0.2	497.62	517.63	11.82	12.01	42.1	43.1
Nonelectrical Machinery	85.6	85.6	83.4	0.0	2.7	461.15	466.62	11.50	11.11	40.1	42.0
Office and Computing	40.4	40.8	41.3	-1.0	-2.2	516.80	508.30	12.16	11.96	42.5	42.5
Electrical Machinery	31.1	31.2	29.7	-0.2	4.8	352.03	348.35	9.12	8.58	38.6	40.6
Transportation Equipment	10.5	10.6	9.6	-1.0	8.8	520.15	520.88	12.21	12.17	42.6	42.8
Scientific Instruments	32.6	32.5	30.7	0.3	5.9	420.65	419.23	10.21	10.25	41.2	40.9
Misc. Manufacturing	6.2	6.4	5.5	-3.1	12.6	432.43	476.00	10.37	11.20	41.7	42.5
Nondurable Goods	156.5	158.2	152.1	-1.1	2.9	411.21	398.90	10.49	10.15	39.2	39.3
Food and Kindred	43.8	44.9	43.2	-2.3	1.4	375.96	361.15	9.47	9.12	39.7	39.6
Textiles and Apparel	4.8	4.8	4.6	-1.2	4.5	262.81	269.38	7.24	7.36	36.3	36.6
Paper and Allied	33.0	33.1	32.7	-0.4	0.9	517.28	502.86	12.20	11.86	42.4	42.4
Printing and Publishing	47.8	48.4	46.0	-1.2	4.0	398.58	388.73	10.92	10.65	36.5	36.5
Chemicals and Petroleum	11.1	11.1	10.5	-0.6	5.1	501.74	486.77	12.45	11.96	40.3	40.7
Rubber, Plastic & Leather	16.0	15.8	15.1	1.3	6.4	373.20	355.31	9.33	8.73	40.0	40.7
Nonmanufacturing	**1,617.5**	**1,662.8**	**1,571.5**	**-2.7**	**2.9**	-	-	-	-	-	-
Mining	6.4	6.7	5.9	-5.2	8.6	574.99	578.59	13.31	13.12	43.2	44.1
Metal Mining	5.3	5.3	4.9	-0.6	7.9	597.04	602.98	13.60	13.55	43.9	44.5
Construction	63.3	74.7	62.9	-15.2	0.7	592.92	587.29	16.20	15.83	36.6	37.1
Transp., Comm., Pub. Util.	102.3	104.6	99.1	-2.2	3.2	-	-	-	-	-	-
Transportation	68.1	70.2	65.3	-3.0	4.3	-	-	-	-	-	-
Trucking & Warehousing	26.0	27.3	25.3	-4.8	2.7	389.06	419.91	12.47	12.61	31.2	33.3
Comm. & Public Util.	34.2	34.4	33.9	-0.6	1.0	581.03	564.87	14.86	14.41	39.1	39.2
Trade	504.3	523.6	491.1	-3.7	2.7	225.88	221.09	8.01	7.84	28.2	28.2
Wholesale	124.4	126.5	120.9	-1.6	2.8	400.73	409.89	10.86	10.73	36.9	38.2
Retail	379.9	397.1	370.1	-4.3	2.6	175.27	167.89	6.82	6.61	25.7	25.4
Building Materials	16.4	17.7	16.6	-7.1	-0.8	314.28	328.19	8.73	8.87	36.0	37.0
General Merchandise	60.4	63.9	58.9	-5.6	2.5	157.61	135.97	6.65	5.99	23.7	22.7
Food Stores	51.6	53.6	49.4	-3.7	4.5	186.91	190.15	7.08	7.23	26.4	26.3
Automotive	41.8	42.6	40.1	-1.9	4.3	311.05	310.82	8.99	8.83	34.6	35.2
Apparel	19.9	21.5	19.7	-7.4	1.3	110.64	101.99	5.56	5.34	19.9	19.1
Home Furnishings	15.6	16.1	15.3	-2.7	2.0	238.40	227.53	8.00	7.46	29.8	30.5
Eating and Drinking	123.7	128.4	120.8	-3.7	2.4	111.54	102.99	5.07	4.79	22.0	21.5
Fin., Insur., Real Estate	119.2	119.4	118.6	-0.2	0.5	-	-	-	-	-	-
Finance	54.4	54.5	55.3	-0.2	-1.5	-	-	-	-	-	-
Insurance	44.6	44.5	43.9	0.2	1.5	-	-	-	-	-	-
Real Estate	20.2	20.4	19.4	-1.1	3.9	-	-	-	-	-	-
Services	491.9	500.6	474.5	-1.8	3.7	-	-	-	-	-	-
Personal Services	25.9	26.4	24.6	-2.0	5.2						
Business Services	98.9	102.6	94.5	-3.6	4.7						
Repair Services	20.6	20.9	19.8	-1.8	3.6						
Health Services	152.9	152.5	148.3	0.3	3.1						
Hospitals	50.2	50.3	51.1	-0.1	-1.8						
Nursing Homes	41.5	41.3	40.6	0.7	2.4						
Legal Services	15.2	15.1	14.6	1.0	4.3						
Private Education	29.1	30.2	28.5	-3.6	2.1						
Government	330.1	333.2	319.4	-0.9	3.4						
Federal	34.2	34.4	33.6	-0.6	1.7						
State	82.6	82.0	80.7	0.8	2.3						
Education	45.8	45.2	45.2	1.4	1.2						
Local	213.3	216.8	205.0	-1.6	4.0						
Education	116.5	119.8	110.2	-2.8	5.7						

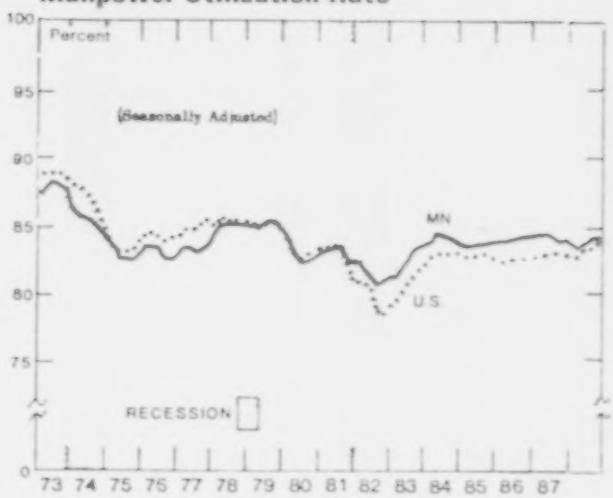
1/ Totals may not add because of rounding.

2/ Average earnings data are on a "gross" basis and are derived from reports of payroll for full-time and part-time production or non-supervisory workers. The payroll is reported before deductions of any kind. Bonuses, retroactive pay, tips, payment in kind, and "fringe benefits" are excluded.

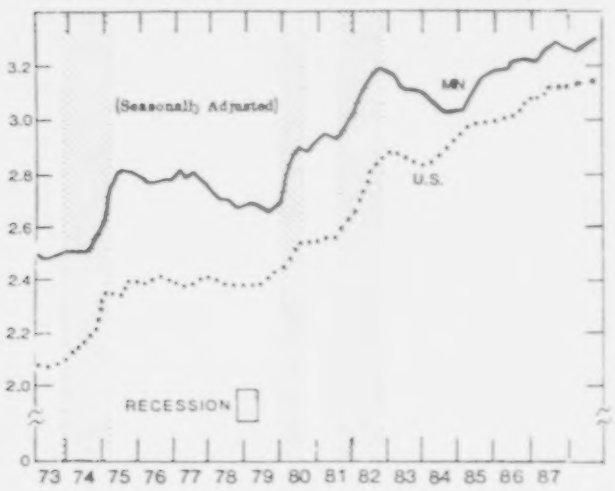
Minnesota Earnings, Manufacturing



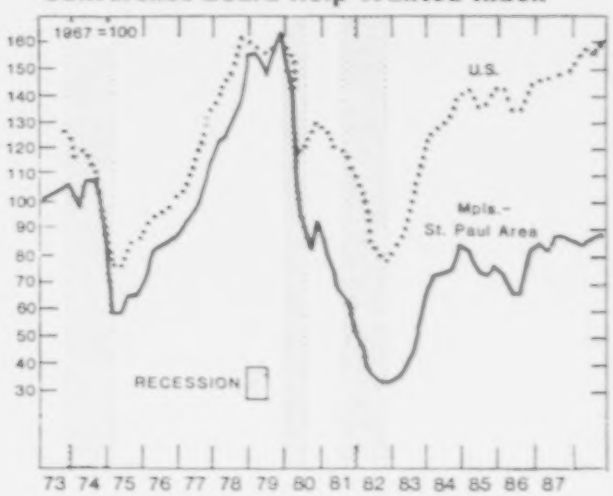
Manpower Utilization Rate



Ratio of Services to Goods Producing Jobs



Conference Board Help Wanted Index



Forecasts of GNP & Minnesota Payroll Employment

By Charles Cline

Our forecasts show Real GNP and Minnesota employment continuing the trend toward slower growth. The declines are consistent with those one quarter ago. But the decline in forecasted growth rates is now more pronounced.

The last several quarters have seen expectations (now realized) of higher inflation, and policy has responded with tighter interest rates. Rates on 91 day treasury bills have increased. The fourth quarter rate was 7.70 percent. That is up by 1.70 percentage points from last year's rate of 6.0 percent.

Both labor and plant utilization rates are high and continue to increase. Presures on prices and wages increase. Additions of high productivity plant and equipment may be what is called for. Perhaps we should consider whether the present high interest rate policy is not reaching its limits as an effective anti-inflationary remedy. This is not a criticism of the Fed but a call to rethink the present policy mix.

Forecast Trends of One Year Growth Rates

	Real GNP		MN. Employment	
First Period	First Yr. Out	Second Yr. Out	First Yr. Out	Second Yr. Out
88:1	5.05	2.90	4.75	3.87
88:2	5.16	3.06	4.81	4.08
88:3	4.83	3.02	4.58	4.00
88:4	4.18	2.71	3.96	3.44
89:1	3.27	2.31	3.03	2.59

Quarter	Real GNP (Billions of 1972 Dollars)	MINNESOTA PAYROLL EMPLOYMENT, BY QUARTER (In Thousands)								
		Total Nonagricultural Wage & Salary	Mining	Contract Construction	Manufacturing	Transportation, Communications, & Public Utilities	Retail and Wholesale Trade	Finance, Insurance, & Real Estate	Services	Government
Current										
1988:4	4,029.70	2,064.84	7.08	82.18	397.93	104.37	519.30	119.50	501.22	333.25
Forecasts										
1989:1	4,068.89	2,012.89	6.55	62.21	390.27	101.55	501.94	119.63	498.22	333.36
1989:2	4,104.93	2,078.93	7.47	78.57	396.65	103.54	522.02	122.13	513.07	337.24
1989:3	4,141.79	2,100.35	7.57	91.43	412.51	103.90	528.32	123.91	519.83	309.25
1989:4	4,173.68	2,129.49	7.12	85.06	407.37	107.03	534.95	123.67	522.94	341.32
1990:1	4,201.84	2,073.89	6.67	63.29	401.45	104.06	516.36	123.82	518.93	341.31
1990:2	4,228.32	2,141.88	7.62	79.31	408.01	106.10	537.70	126.42	534.91	344.88
1990:3	4,252.86	2,165.64	7.66	92.28	424.36	106.58	542.88	128.35	539.79	317.77
1990:4	4,275.30	2,191.63	7.16	85.06	417.41	109.53	549.97	128.08	543.33	349.38
1991:1	4,298.82	2,127.68	6.70	62.75	409.76	106.06	529.57	128.19	538.03	349.00

Notes

1. These forecasts are produced using the Vector Autoregression Model Developed for Research by Rao Aiyagari.
2. The concept of employment forecasted is that of Nonagricultural Wage and Salary employment. The count represents the number of jobs held since the data is generated from a survey of employer payroll records. Groups included in labor force employment, but excluded here are the self employed, domestics, unpaid family workers.
3. Employment forecasts are seasonally unadjusted values. Real GNP is seasonally adjusted.
4. Forecasts of major industry employment do not sum to the forecast of total wage and salary employment. This is due to random error in the forecasted values.
5. There is great diversity in the accuracy of the forecasts among the major industry divisions, especially mining. More information on their accuracy can be obtained from the author on request.

Unemployment Insurance Claimaints in Minnesota

Characteristics	FOURTH QUARTER 1989			JANUARY 1989			
	Number	Percent Change From		Number	Percent Change From		Percent Long Term
		Last Qtr.	Year Ago		Month Ago	Year Ago	
By Age & Sex							
Male	20,660	54.4	-6.3	43,637	36.9	-4.7	6.9
Under 45	15,590	56.6	-7.9	33,090	36.9	-6.1	6.4
16-24	2,501	87.8	-21.1	5,741	39.7	-16.9	4.1
25-34	7,919	58.1	-6.8	16,764	35.4	-5.4	6.3
35-44	5,170	43.0	-1.8	10,585	37.9	-0.3	7.7
45 and Over	5,070	48.0	-0.8	10,547	36.6	0.3	8.5
45-54	3,041	50.3	-1.0	6,326	36.6	0.2	8.2
55 and Over	2,029	44.6	-0.5	4,221	36.6	0.4	8.9
Female	8,784	-12.2	-9.5	12,008	28.3	0.7	17.9
Under 45	6,397	-11.5	-10.9	8,569	26.3	-1.7	17.3
16-24	929	-2.2	-25.1	1,382	37.0	-16.5	10.6
25-34	3,182	-9.2	-8.2	4,147	24.0	0.3	18.7
35-44	2,286	-17.4	-7.4	3,040	25.2	3.8	18.6
45 and Over	2,387	-14.0	-5.4	3,439	33.6	7.2	19.4
45-54	1,444	-13.2	-5.9	2,003	27.5	4.9	18.5
55 and Over	943	-15.0	-4.7	1,436	43.2	10.6	20.6
By Industry	29,444	25.9	-7.2	55,645	34.9	-3.6	9.3
Ag., For., Fish.	825	210.2	-14.0	2,089	26.4	-5.1	1.5
Mining	302	694.7	-27.6	1,043	51.6	-5.1	1.1
Construction	7,707	137.9	-10.5	21,313	45.0	-10.3	2.3
Manufacturing	6,939	19.3	-4.3	11,869	34.9	5.8	12.2
Pub. Utilities	1,252	19.5	-4.4	2,442	42.3	2.3	11.2
Wholesale Trade	2,068	9.4	12.6	2,907	20.9	13.7	21.0
Retail Trade	2,784	-3.3	-11.4	4,270	38.4	-3.2	15.6
Fin., Ins., Real Est.	1,153	-2.4	-19.4	1,341	10.3	-19.5	24.4
Services	4,767	-18.5	-12.5	5,891	18.5	-10.3	17.9
Public Admin.	705	85.5	-16.3	1,015	10.4	-5.8	12.1
Inf. Not Available	942	18.8	92.6	1,465	34.3	95.1	10.6
By Occupation	29,444	25.9	-7.2	55,645	34.9	-3.6	9.3
Prof., Tech., Mgr.	5,376	-11.7	-1.4	6,039	11.9	2.1	25.6
Clerical	3,230	-11.5	-8.6	3,860	20.9	-3.4	22.8
Sales	1,210	-0.7	-7.4	1,539	21.8	-4.5	24.4
Services	1,819	3.4	-14.2	2,454	20.9	-9.6	14.9
Farm., For., Fish.	755	295.3	-14.4	1,826	25.8	-6.1	1.6
Processing	954	27.5	-9.7	2,384	86.0	14.1	6.7
Machine Trade	1,604	24.2	2.2	2,579	33.5	7.0	13.3
Benchwork	2,086	7.7	-16.9	3,471	30.6	3.0	10.0
Structural Work	8,207	120.7	-8.0	22,114	45.5	-8.7	2.6
Misc.	3,969	55.3	-6.3	9,077	38.3	-0.9	5.8
Inf. Not Available	234	4.0	47.2	302	11.9	15.7	13.4
By Duration	29,444	25.9	-7.2	55,645	34.9	-3.6	
0-14 Weeks	24,878	36.8	-7.1	50,470	37.2	-3.7	
15+ Weeks (Long-Term)	4,566	-12.1	-8.1	5,175	16.2	-2.5	

The above table includes data on those claiming benefits from the regular state program. Federal employees and veterans are excluded, and recipients of those programs are in effect. benefits from extended programs are reported only when

METROPOLITAN AREAS

Minneapolis–St. Paul MSA

By Kevin Alaspa

Seasonal Factors Cause January Employment Decline

Employment in the Twin Cities metropolitan area declined in January, a normal seasonal development. Outdoor occupations are usually at their lowest employment level in mid-winter, and many temporary jobs associated with the holiday retail season ended in January. The increase in the unemployment rate from 3.3 percent in December to 4.0 in January was pretty much anticipated.

Wage and salary employment dropped by 28,300 in January, and as expected, most of this decline occurred in retail trade (11,000) and construction (6,200). Most of the decline in retail trade took place in general merchandise stores and eating and drinking establishments. Employment in the services sector also dropped by 6,200, the majority of this decline occurring in business services.

Employment Gains Over The Year Have Been Impressive

Even though the number of unemployed in January 1989 was slightly above the total for January 1988, the important thing to note is that employment rose significantly over the year. Wage and salary employment in the metro area was 35,300 higher than in January 1988, an increase of 2.8 percent. Employment has grown by approximately 9,000 in both trade and services. Strong national economic conditions have been a major influence on the business environment in the Twin Cities, and contributed to the steady growth in employment evident over the past few years. The market for products manufactured in the Twin Cities has been healthy in recent years, and the resulting demand for skilled workers in many occupations has created some worker shortages.

Over the next couple of months, employment levels will remain relatively stable until seasonal work such as construction resumes in the spring. Businesses related to tourism and recreational activities (such as professional sports) will begin to add workers in the late spring and early summer. Employment should continue to grow at a steady pace throughout the coming year as long as the national economy remains strong. The diversity of the industrial base in the Twin Cities remains a factor in keeping employment levels high; temporary downturns in any one industry do not cause the entire local economy to suffer unduly.

Labor Force Estimates

AREA	EMPLOYMENT			UNEMPLOYMENT			UNEM.RATE		
	Jan. 1989	Dec. 1988	Jan. 1988	Jan. 1989	Dec. 1988	Jan. 1988	Jan. 1989	Dec. 1988	Jan. 1988
Mpls-St. Paul MSA	1,334,614	1,350,654	1,305,525	54,992	45,937	52,622	4.0	3.3	3.9
REGION 11	1,252,690	1,267,317	1,226,374	48,875	41,044	45,984	3.8	3.1	3.6
Anoka	127,734	129,225	125,050	6,098	4,881	5,555	4.6	3.6	4.3
Carver	23,587	23,862	23,091	1,099	916	988	4.5	3.7	4.1
Dakota	136,574	138,169	133,705	6,255	5,119	5,432	4.4	3.6	3.9
Hennepin	597,332	604,308	584,785	20,704	17,681	19,461	3.3	2.8	3.2
Ramsey	268,433	271,567	262,794	9,895	8,388	9,903	3.6	3.0	3.6
Scott	27,84-	28,172	27,262	1,859	1,513	1,779	6.3	5.1	6.1
Washington	71,199	72,014	69,687	2,965	2,546	2,866	4.0	3.4	4.0
Chisago	13,712	13,872	13,424	1,313	949	1,273	8.7	6.4	8.7
Isanti	11,651	11,787	11,406	952	700	932	7.6	5.6	7.6
Wright	31,605	31,975	30,944	2,783	2,115	2,603	8.1	6.2	7.8
St. Croix, WI	24,956	25,703	23,377	1,069	1,129	1,830	4.1	4.2	7.3
Bloomington	56,299	56,957	55,117	1,931	1,623	1,750	3.3	2.8	3.1
Minneapolis	208,269	210,701	203,894	7,916	6,928	7,215	3.7	3.2	3.4
St. Paul	142,507	144,171	139,513	6,037	5,129	6,087	4.1	3.4	4.2

Mpls.–St. Paul Nonfarm Wage & Salary Employment, Hours & Earnings

INDUSTRY	EMPLOYMENT1/ (thousands)			PERCENT CHANGE FROM		PRODUCTION WORKERS' HOURS & EARNINGS2/					
						Average Weekly Earnings		Av. Hourly Earnings		Average Weekly Hrs.	
	Jan. 1989	Dec. 1988	Jan. 1988	Dec. 1988	Jan. 1988	Jan. 1989	Jan. 1988	Jan. 1989	Jan. 1988	Jan. 1989	Jan. 1988
Total Nonagricultural	1,316.8	1,345.1	1,281.5	-2.1	2.8	-	-	-	-	-	-
Manufacturing	265.0	265.8	257.6	-0.3	2.9	450.93	448.63	11.33	11.05	39.8	40.6
Durable Goods	165.9	166.3	161.3	-0.2	2.8	459.42	462.18	11.40	11.11	40.3	41.6
Lumber and Furniture	9.1	8.9	9.2	2.1	-0.6	493.74	464.56	12.66	12.29	39.0	37.8
Stone, Clay and Glass	3.0	3.3	2.9	-7.5	5.6	421.03	383.18	11.41	9.80	36.9	39.1
Primary Metals	5.3	5.3	4.9	-0.3	9.2	413.95	400.37	9.56	9.12	43.3	43.9
Fabricated Metals	26.2	26.4	26.3	-1.0	-0.4	506.76	546.01	12.33	12.61	41.1	43.3
Nonelectrical Machinery	65.7	65.8	64.2	-0.2	2.2	469.25	481.62	11.91	11.44	39.4	42.1
Office and Computing	31.3	31.7	32.6	-1.3	-3.7	479.50	487.72	12.17	11.53	39.4	42.3
Electrical Machinery	17.1	16.9	16.8	0.7	1.5	386.22	343.17	9.42	8.71	41.0	39.4
Transportation Equipment	5.6	5.7	5.4	-0.7	4.2	682.75	690.30	15.24	15.34	44.8	45.0
Scientific Instruments	30.0	29.9	28.3	0.3	6.0	421.54	428.63	10.46	10.48	40.3	40.9
Misc. Manufacturing	3.9	4.0	3.4	-3.7	14.5	494.59	441.15	11.61	9.76	42.6	45.2
Nondurable Goods	99.1	99.6	96.3	-0.4	3.0	437.92	428.54	11.20	10.96	39.1	39.1
Food and Kindred	17.7	17.8	17.7	-0.7	0.1	476.96	441.57	11.17	10.93	42.7	40.4
Textiles and Apparel	2.0	2.0	2.0	-0.6	0.9	276.83	252.33	7.82	7.23	35.4	34.9
Paper and Allied	25.6	25.6	25.2	0.0	1.5	474.70	469.06	11.75	11.33	40.4	41.4
Printing and Publishing	33.8	34.1	32.3	-0.9	4.5	399.67	394.94	10.92	10.85	36.6	36.4
Chemicals and Petroleum	9.4	9.4	8.9	0.0	5.9	549.24	521.80	13.80	12.98	39.8	40.2
Rubber, Plastic & Leather	10.7	10.7	10.3	0.4	4.7	392.78	415.48	10.02	10.06	39.2	41.3
Nonmanufacturing	1,051.8	1,079.2	1,024.0	-2.5	2.7	-	-	-	-	-	-
Mining	0.4	0.5	0.4	-14.9	9.6	498.96	208.78	12.96	8.03	38.5	26.0
Construction	45.0	51.2	44.4	-12.2	1.4	633.92	628.13	17.56	16.84	36.1	37.3
Transp., Comm., Pub. Util.	71.6	72.6	69.0	-1.5	3.7	-	-	-	-	-	-
Transportation	49.7	50.7	47.2	-1.8	5.3	-	-	-	-	-	-
Trucking & Warehousing	16.3	17.0	15.9	-4.1	3.0	379.31	402.39	12.99	13.15	29.2	30.6
Comm. & Public Util.	21.8	22.0	21.8	-0.6	0.2	593.35	554.83	14.76	14.19	40.2	39.1
Trade	330.1	342.0	321.9	-3.5	2.6	249.66	243.95	8.76	8.50	28.5	28.7
Wholesale	85.4	86.3	83.5	-1.0	2.3	427.89	437.63	11.38	11.25	37.6	38.9
Retail	244.7	255.7	238.4	-4.3	2.6	195.32	185.34	7.60	7.24	25.7	25.6
Building Materials	9.8	10.6	9.8	-7.3	0.2	374.19	335.40	10.28	9.75	36.4	34.4
General Merchandise	43.3	45.9	43.0	-5.7	0.7	166.84	144.69	7.01	6.21	23.8	23.3
Food Stores	29.4	30.7	27.8	-4.2	5.9	228.76	236.26	8.60	8.56	26.6	27.6
Automotive	25.4	25.8	23.9	-1.3	6.3	373.46	379.38	10.52	10.09	35.5	37.6
Apparel	13.1	14.2	13.0	-7.3	1.2	103.03	91.35	5.63	5.47	18.3	16.7
Home Furnishings	11.2	11.5	11.0	-2.0	2.2	246.23	222.09	8.67	7.58	28.4	29.3
Eating and Drinking	80.5	83.3	78.4	-3.3	2.7	126.11	117.50	5.63	5.39	22.4	21.8
Fin., Insur., Real Estate	93.2	93.3	92.2	0.0	1.1	-	-	-	-	-	-
Finance	39.1	39.1	39.8	0.0	-1.9	-	-	-	-	-	-
Insurance	37.6	37.4	36.7	0.6	2.5	-	-	-	-	-	-
Real Estate	16.5	16.8	15.7	-1.4	5.6	-	-	-	-	-	-
Services	332.0	338.2	322.8	-1.8	2.8						
Personal Services	18.4	18.4	17.8	0.0	3.2						
Business Services	84.4	88.0	81.3	-4.0	3.8						
Repair Services	15.3	15.4	14.9	-0.8	2.2						
Health Services	83.9	83.8	83.2	0.1	0.9						
Hospitals	28.1	28.2	30.2	-0.3	-6.9						
Nursing Homes	21.2	21.2	21.4	0.1	-0.7						
Legal Services	12.2	12.1	11.6	1.2	5.6						
Private Education	17.6	17.8	17.3	-1.1	1.9						
Government	179.5	181.4	173.2	-1.1	3.6						
Federal	21.0	21.0	20.4	0.0	2.8						
State	53.8	54.0	52.8	-0.4	1.8						
Education	29.2	29.7	29.1	-1.5	0.4						
Local	104.8	106.5	100.0	-1.6	4.8						
Education	58.0	60.1	54.2	-3.5	7.0						

1/ Totals may not add because of rounding.

2/ Average earnings data are on a "gross" basis and are derived from reports of payroll for full-time and part-time production or non-supervisory workers. The payroll is reported before deductions of any kind. Bonuses, retroactive pay, tips, payment in kind, and "fringe benefits" are excluded.

Central and Northwest Minnesota

By Ron Daws

Unemployment Rates Rise Between December And January, Except In St. Cloud, While Employment Drops Seasonally

While the economies of Central and Northwest Minnesota seem to deteriorate slightly, the St. Cloud MSA continued to perform well. St. Cloud's unemployment rate remained at 6.3 percent between December and January. During the entire 1980s the rate rose between these months. During January of 1988, however, the rate was 5.7 percent, more than a half of a percent lower. Whether this signals an upturn in unemployment levels in the St. Cloud MSA (and the rest of the area) for 1989 will become clearer as data for the next few months becomes available. Unemployment was so low during 1988 that a modest upturn in joblessness would not signal a downturn of the area's labor market.

Total employment rose to 91,085 in January, up from 89,580 in December and 88,207 last January. That was 3.3 percent additional jobs in the MSA over the year. It demonstrates that the area is still able to generate new jobs.

Despite the increase in total employment over the month and year, the number of nonfarm payroll jobs declined by 2.5 percent over the month, from 74,626 in December to 72,782 in January.

The primary job losers over the month were construction and mining (down 11.1%), other services (down 4.7%), finance, insurance and real estate (down 3.1%) and retail trade (down 2.6%). Retail trade's drop was caused primarily by the elimination of holiday help.

Over the year, nonfarm payroll employment rose 5.7 percent (from 68,862 last December). Every major industry except finance, insurance and real estate gained jobs. Construction seems to be on the mend again. Jobs jumped by 21.4 percent. Manufacturing jobs rose 7.0 percent, wholesale trade rose 8.1 percent, government 7.3 percent, and nonmedical services jobs rose 5.4 percent.

Labor Force Estimates

AREA	EMPLOYMENT			UNEMPLOYMENT			UNEMP. RATE		
	Jan. 1989	Dec. 1988	Jan. 1988	Jan. 1989	Dec. 1988	Jan. 1988	Jan. 1989	Dec. 1988	Jan. 1988
St. Cloud MSA*	91,085	89,580	88,207	6,119	6,060	5,307	6.3	6.3	5.7
REGION 1	37,901	36,984	37,840	4,453	3,384	4,069	10.5	8.0	9.7
Kittson	2,196	2,228	2,241	283	199	269	11.4	8.2	10.7
Marshall	4,192	4,239	4,185	981	632	863	19.0	13.0	17.1
Norman	3,170	3,251	3,238	294	239	295	8.5	6.8	8.3
Pennington	5,872	6,093	5,787	761	473	691	11.5	7.2	10.7
Polk	13,265	13,523	13,412	1,185	931	1,113	8.2	6.4	7.7
Red Lake	1,249	1,297	1,266	376	258	332	23.1	16.6	20.8
Roseau	7,955	8,353	7,711	573	652	506	6.7	7.2	6.2
REGION 2	28,176	28,859	27,945	3,171	2,123	2,728	10.1	6.9	8.9
Beltrami	14,865	15,475	14,957	1,213	824	1,087	7.5	5.1	6.8
Clearwater	2,928	3,058	2,967	817	508	682	21.8	14.2	18.7
Hubbard	6,387	6,331	6,104	768	538	610	10.7	7.8	9.1
Lake of Woods	1,771	1,830	1,704	112	69	122	5.9	3.6	6.7
Mahnomen	2,225	2,165	2,213	261	184	227	10.5	7.8	9.3
REGION 4	88,723	91,212	88,436	7,209	5,150	6,141	7.5	5.3	6.5
Becker	12,009	12,132	12,244	1,751	1,153	1,130	12.7	8.7	8.4
Clay	24,064	24,706	24,133	1,383	882	1,163	5.4	3.4	4.6
Douglas	13,570	14,051	13,746	844	672	862	5.9	4.6	5.9
Grant	2,611	2,676	2,570	263	178	218	9.2	6.2	7.8
Otter Tail	22,611	23,438	21,946	2,057	1,594	1,899	8.3	6.4	8.0
Pope	4,191	4,261	4,122	362	255	324	7.7	5.6	7.3
Stevens	4,775	4,915	4,730	226	178	235	4.5	3.5	4.7
Traverse	1,904	1,933	1,919	129	93	132	6.3	4.6	6.4
Wilkin	2,998	3,098	3,026	204	145	178	6.4	4.5	5.6
REGION 5	52,679	54,750	52,325	5,693	4,124	5,011	9.8	7.0	8.7
Cass	7,074	7,220	7,069	1,126	781	945	13.7	9.8	11.8
Crow Wing	19,095	20,179	18,973	1,714	1,272	1,538	8.2	5.9	7.5
Morrison	12,437	13,037	12,369	1,463	1,086	1,293	10.5	7.7	9.5
Todd	9,499	9,669	9,446	956	695	864	9.1	6.7	8.4
Wadena	4,573	4,645	4,468	445	290	371	8.9	5.9	7.7
REGION 6E	51,498	52,949	50,744	3,501	3,498	3,122	6.4	6.2	5.8
Kandiyohi	18,040	18,799	17,812	1,042	1,592	1,025	5.4	7.8	5.4
McLeod	17,375	17,847	16,912	863	701	712	4.7	3.8	4.0
Meeker	7,862	8,154	7,725	945	671	752	10.7	7.6	8.9
Renville	8,150	8,149	8,295	651	534	633	7.4	6.1	7.1
REGION 7E	46,224	46,807	47,265	4,967	3,648	4,696	9.4	7.0	9.0
Chisago	13,711	13,872	13,524	1,313	949	1,273	8.7	6.4	8.7
Isanti	11,681	11,768	11,406	952	705	932	7.6	5.6	7.6
Kanabec	4,399	5,157	5,296	693	506	640	12.2	8.4	11.2
Mille Lacs	9,223	9,043	9,069	814	624	733	8.3	6.5	7.8
Pine	8,749	8,948	9,688	1,195	864	1,118	12.0	8.8	11.4
REGION 7W	120,690	121,555	119,151	8,902	8,176	7,910	6.8	6.3	6.2
Benton	14,411	14,174	13,967	939	1,027	840	6.1	6.8	5.7
Sherburne	17,197	16,913	16,654	1,404	1,534	1,212	7.5	8.3	6.8
Stearns	59,476	60,493	57,596	3,776	3,499	3,255	6.0	5.6	5.3
Wright	31,606	31,975	30,944	2,783	2,115	2,603	8.1	6.2	7.8

ST. CLOUD MSA NONFARM WAGE & SALARY EMPLOYMENT

INDUSTRY	EMPLOYMENT			PERCENT CHANGE FROM	
	Jan. 1989	Dec. 1988	Jan. 1988	MONTH AGO	YEAR AGO
Total Nonfarm Wage & Salary	72,782	74,626	68,862	-2.5	5.7
Total Manufacturing	13,224	13,327	12,361	-0.8	7.0
Durable Goods	7,401	7,437	7,017	-0.5	5.5
Nondurable Goods	5,823	5,890	5,344	-1.1	9.0
Total Nonmanufacturing	59,558	61,299	56,501	-2.8	5.4
Construction & Mining	3,091	3,478	2,547	-11.1	21.4
Trans., Insur., & Pub. Util.	3,717	3,730	3,539	-0.3	5.0
Total Trade	21,760	22,219	20,924	-2.1	4.0
Wholesale Trade	3,388	3,365	3,133	0.7	8.1
Retail Trade	18,372	18,854	17,791	-2.6	3.3
Finan., Insur., & Real Estate	2,204	2,275	2,245	-3.1	-1.8
Total Services					
Health Services	5,145	5,162	5,034	-0.3	2.2
Other Services	10,206	10,706	9,687	-4.7	5.4
Government	13,435	13,729	12,525	-2.1	7.3

Southern Minnesota

By Sue Borgfelt

Labor Force Estimates

AREA	EMPLOYMENT			UNEMPLOYMENT			UNEMP. RATE		
	Jan. 1989	Dec. 1988	Jan. 1988	Jan. 1989	Dec. 1988	Jan. 1988	Jan. 1989	Dec. 1988	Jan. 1988
REGION 6W	22,192	22,884	22,171	1,815	1,485	1,677	7.6	6.1	7.0
Big Stone	2,665	2,679	2,690	191	145	180	6.7	5.2	6.3
Chippewa	5,985	6,400	5,951	667	489	575	10.0	7.1	8.8
Lac Qui Parle	3,909	3,941	3,955	221	175	188	5.4	4.3	4.5
Swift	4,526	4,623	4,490	359	370	348	7.3	7.4	7.2
Yellow Medicine	5,108	5,241	5,085	377	303	386	6.9	5.5	7.1
REGION 8	57,111	58,091	56,841	3,580	3,080	3,153	5.9	5.0	5.3
Cottonwood	5,899	5,910	5,865	352	317	333	5.6	5.1	5.4
Jackson	4,894	4,986	4,821	332	275	361	6.4	5.3	7.0
Lincoln	2,911	2,999	2,911	243	204	183	7.7	6.4	5.9
Lyon	11,941	12,094	12,010	768	797	708	6.0	6.2	5.6
Murray	4,218	4,323	4,168	377	300	366	8.2	6.5	8.1
Nobles	10,537	10,635	10,412	574	430	463	5.2	3.9	4.3
Pipestone	5,169	5,290	5,122	325	286	166	5.9	5.0	3.2
Redwood	7,177	7,370	7,138	434	330	392	5.7	4.3	5.2
Rock	4,365	4,375	4,394	175	137	179	3.9	3.0	3.9
REGION 9	102,848	104,456	102,669	5,898	4,529	5,536	5.4	4.2	5.1
Blue Earth	27,408	27,610	27,021	1,014	894	958	3.6	3.1	3.4
Brown	12,569	12,975	12,577	838	553	800	6.3	4.1	6.0
Faribault	7,163	7,411	7,349	558	430	458	7.2	5.5	5.9
Le Sueur	9,646	9,854	9,895	983	786	897	9.2	7.4	8.3
Martin	10,348	10,399	10,627	780	565	822	7.0	5.2	7.2
Nicollet	15,057	15,168	14,845	537	406	531	3.4	2.6	3.5
Sibley	6,048	6,116	5,963	531	394	481	8.1	6.1	7.5
Waseca	8,710	8,936	8,776	373	298	389	4.1	3.2	4.2
Watonwan	5,899	5,987	5,616	284	207	200	4.6	3.3	3.4
REGION 10	212,330	216,109	209,003	10,246	8,271	9,588	4.6	3.7	4.4
Dodge	7,177	7,786	7,084	594	433	531	7.6	5.3	7.0
Fillmore	8,947	9,138	9,077	663	451	692	6.9	4.7	7.1
Freeborn	16,945	17,042	16,613	813	683	674	4.6	3.9	3.9
Goodhue	19,741	19,686	19,740	974	705	956	4.7	3.5	4.6
Houston	8,525	8,789	8,380	492	316	475	5.5	3.5	5.4
Mower	16,049	16,206	16,248	799	655	761	4.7	3.9	4.5
Olmsted	59,822	60,122	57,572	1,995	1,922	1,881	3.2	3.1	3.2
Rice	26,580	27,112	26,187	1,550	1,241	1,276	5.5	4.4	4.6
Steele	15,086	15,434	14,947	611	493	602	3.9	3.1	3.9
Wabasha	7,892	8,075	7,960	577	394	575	6.8	4.7	6.7
Winona	25,566	26,719	25,195	1,178	975	1,163	4.4	3.5	4.4
Rochester	36,992	37,177	35,600	1,263	1,247	1,211	3.3	3.2	3.3

ROCHESTER MSA NONAGRICULTURAL WAGE & SALARY EMPLOYMENT

INDUSTRY	EMPLOYMENT			PERCENT CHANGE FROM	
	January 1989	December 1988	January 1988	Month Ago	Year Ago
Total Nonagricultural Wage & Salary	**61,106**	**62,178**	**57,449**	**-1.7**	**6.4**
Total Manufacturing	**11,212**	**11,211**	**10,754**	**0.0**	**4.3**
Durable Goods	9,426	9,425	9,065	0.0	4.0
Nondurable Goods	1,786	1,786	1,689	0.0	5.7
Total Nonmanufacturing	**49,894**	**50,967**	**46,695**	**-2.1**	**6.9**
Construction & Mining	1,657	1,967	1,658	-15.8	-0.1
Transp., Comm., & Public Util.	1,746	1,823	1,665	-4.2	4.9
Total Trade	12,636	13,133	11,799	-3.8	7.1
Wholesale Trade	1,242	1,242	1,172	0.0	6.0
Retail Trade	11,394	11,891	10,627	-4.2	7.2
Finan., Insur., & Real Estate	1,562	1,548	1,493	0.9	4.6
Total Services	25,946	25,976	23,932	-0.1	8.4
Health Services	17,682	17,707	16,657	-0.1	6.2
Other Services	8,264	8,269	7,275	-0.1	13.6
Government	6,347	6,520	6,148	-2.7	3.2

Employment And Unemployment Rise Over The Year In Southern Minnesota

More people were employed this January than a year ago in Southern Minnesota, yet there were also more unemployed. Most counties had higher unemployment rates than last year, though generally, the differences were not significant. Whether these over-the-year increases in unemployment will continue remains to be seen. The monthly jump in unemployment in most counties was mainly seasonal.

The Rochester MSA's nonagricultural wage and salary employment rose 6.4 percent (creating 3,657 new jobs) over the year. Service industries generated 55 percent of this increase, with health services adding 1,025 workers, and nonhealth services (the highest percentage gainer at 13.6 percent) adding 989. The over-the-year gain in nonhealth service employment was greater this month than last (the difference was 638 in December) because the number of jobs fell less this year in December than last year. There are no current figures available on industry breakdowns among nonhealth services, although from June 1987 to June 1988, the industries gaining the most employment were business services, social services, and hotels and other lodging places. Retail trade provided the third largest number of new jobs (767) since January 1988. Construction was the only industry that did not gain jobs.

Over the month, most industries lost seasonal jobs. Retail trade jobs were reduced by 497 following the holiday rush; construction jobs shrunk by 310. Total nonfarm payroll jobs declined by 1,072. Employment usually starts picking up in March.

Looking at annual averages (page 20), total nonfarm payroll employment increased 19 percent from 1980 to 1988. Health services, retail trade, and nonhealth services were the largest gainers. Transportation, communication, and public utilities, and wholesale trade lost jobs.

Northeast Minnesota

By Ron Daws

Employment Rises Over The Year But Drops Over The Month, While Unemployment Rises Over The Month And Drops Over The Year

The number of jobs in Region 3 rose almost one percent over the year, but dropped one half of a percent over the month. The unemployment rate moved in the opposite direction. It dropped from 8.3 percent last January to 7.7 percent this January. Over the month, Region 3's unemployment rate rose seasonally from 5.9 percent.

Duluth's unemployment rate also rose seasonally over the month, jumping from 4.4 percent in December to 5.7 percent in January. That 5.7 percent was, however, lower than last January's 6.4 percent rate.

On the whole, Duluth's economy performed quite well in 1988. Recently released labor force data shows that Duluth's annual average unemployment rate in 1988 was 5.7 percent. In 1987 it was 7.1 percent, and in 1986 it was 6.0 percent. In fact, Duluth's rate has never been lower during the 1980s.

Duluth's employment also rose over the year, but was down seasonally over the month. Not since before the 1981-82 recession have there been more jobs in January than the 35,469 estimated for this January.

Several industries were instrumental in adding jobs over the year. Construction employment shot up 29.1 percent. Health services added 9.4 percent more workers. Durable goods manufacturing added 8.9 percent more jobs, and the large retail trade segment created 2.4 percent more jobs.

Only transportation, communication and public utilities, wholesale trade, and nonmedical services lost significant numbers of workers over the year.

Over the month, every industry except nondurable goods manufacturing and health services lost jobs. The big losers were: construction (-9.7%), transportation, communication and public utilities (-8.4%) and retail trade (-3.0%). All of these moves were normal seasonal developments.

Labor Force Estimates

AREA	EMPLOYMENT			UNEMPLOYMENT			UNEMP. RATE		
	Jan. 1989	Dec. 1988	Jan. 1988	Jan. 1989	Dec. 1988	Jan. 1988	Jan. 1989	Dec. 1988	Jan. 1988
REGION 3	127,249	127,864	126,169	10,616	7,984	11,410	7.7	5.9	8.3
Aitkin	4,387	4,682	4,470	709	518	650	13.9	10.0	12.7
Carlton	11,286	11,556	11,315	1,012	761	1,088	8.2	6.2	8.8
Cook	2,337	2,340	2,320	247	160	198	9.6	6.4	7.9
Itasca	16,287	16,329	16,147	1,545	1,146	1,599	8.7	6.6	9.0
Koochiching	7,232	7,295	7,036	545	437	539	7.0	5.7	7.1
Lake	3,546	3,745	3,360	485	321	527	12.0	7.9	13.6
St. Louis	82,174	81,917	81,521	6,073	4,641	6,809	6.9	5.4	7.7
City of Duuth	35,469	35,358	35,188	2,149	1,637	2,425	5.7	4.4	6.4
Balance St. Louis	46,705	46,559	46,333	3,924	3,004	4,384	7.8	6.1	8.6

DULUTH AND DULUTH-SUPERIOR MSA NONFARM WAGE & SALARY EMPLOYMENT

INDUSTRY	EMPLOYMENT DULUTH			PERCENT CHANGE		EMPLOYMENT DULUTH-SUPERIOR			PERCENT CHANGE	
	Jan. 1989	Dec. 1988	Jan. 1988	MO. AGO	YR. AGO	Jan. 1989	Dec. 1988	Jan. 1988	MO. AGO	YR. AGO
Total Nonfarm Wage & Salary	45,744	46,760	44,821	-2.2	2.1	90,038	91,940	88,336	-2.1	1.9
Total Manufacturing	3,906	3,899	3,703	0.2	5.5	7,877	7,908	7,321	-0.4	7.6
Durable Goods	1,598	1,616	1,467	-1.1	8.9	4,159	4,204	3,872	-1.1	7.4
Nondurable Goods	2,308	2,283	2,236	1.1	3.2	3,718	3,704	3,449	0.4	7.8
Total Nonmanufacturing	41,838	42,861	41,118	-2.4	1.8	82,161	84,032	81,015	-2.2	1.4
Construction	1,637	1,813	1,268	-9.7	29.1	2,648	3,084	2,473	-14.1	7.1
Transp., Com., Pub. Util.	2,558	2,794	2,731	-8.4	-6.3	5,452	5,795	5,428	-5.9	0.4
Total Trade	11,543	11,892	11,351	-2.9	1.7	22,116	22,811	22,014	-3.0	0.5
Wholesale Trade	1,635	1,679	1,674	-2.6	-2.3	3,519	3,584	3,543	-1.8	-0.7
Retail Trade	9,908	10,213	9,677	-3.0	2.4	18,597	19,227	18,471	-3.3	0.7
Finan., Insur., Real Est.	1,835	1,887	1,816	-2.8	1.0	3,090	3,156	3,075	-2.1	0.5
Services, Mining, & Misc.										
Health Services	5,927	5,915	5,420	0.2	9.4	9,313	9,324	8,728	-0.1	6.7
Other Services	6,796	6,840	6,934	-0.6	-2.0	10,951	10,988	11,276	-0.3	-2.9
Government	10,564	10,645	10,641	-0.8	-0.7	22,186	22,283	21,996	-0.4	0.9

Comparative Annual Average Nonfarm Payroll Employment For Minnesota Metropolitan Areas, 1980-1988

Minneapolis-St. Paul MSA	1980	1981	1982	1983	1984	1985	1986	1987	1988	Percent Change 1980-88
Total Nonfarm W&S	1,110,462	1,108,920	1,084,064	1,097,559	1,175,580	1,211,037	1,232,702	1,278,788	1,319,742	18.8
Total Mfg	249,173	246,982	238,149	237,916	257,838	257,544	251,225	254,214	263,864	5.9
Durables	161,749	160,057	152,187	151,348	165,781	163,612	157,488	157,977	165,088	2.1
Nondurables	87,424	86,925	85,962	86,569	92,057	93,933	93,737	96,236	98,776	13.0
Total Nonmfg	861288.0	861938	845916	859643	917742	953493	981476	1024574	1055879	22.6
Const & Mining	46,712	40,975	36,843	38,126	43,881	47,548	50,091	53,746	53,412	14.3
Trans,Com,P.U.	64,814	63,707	61,699	62,115	65,206	67,049	67,270	68,971	70,423	8.7
Trade	273,386	273,098	266,398	268,442	288,152	297,200	303,086	316,176	329,506	20.5
Wholesale	75,819	76,015	73,754	72,013	76,775	78,702	80,540	82,440	85,263	12.5
Retail	197,567	197,083	192,645	196,429	211,390	218,497	222,546	233,737	244,242	23.6
Fin, Ins, R.E.	70,789	73,584	73,671	75,509	86,923	84,288	88,883	92,028	93,020	31.4
Services	244,351	250,482	252,217	261,347	281,336	295,757	306,045	322,015	333,731	36.6
Health	71,106	73,571	74,255	74,203	75,300	78,449	80,660	83,409	83,101	16.9
Other	173,245	176,911	177,962	187,144	206,036	217,308	225,385	238,606	250,630	44.7
Government	161,236	160,093	155,087	154,105	158,245	161,652	166,101	171,638	175,787	9.0

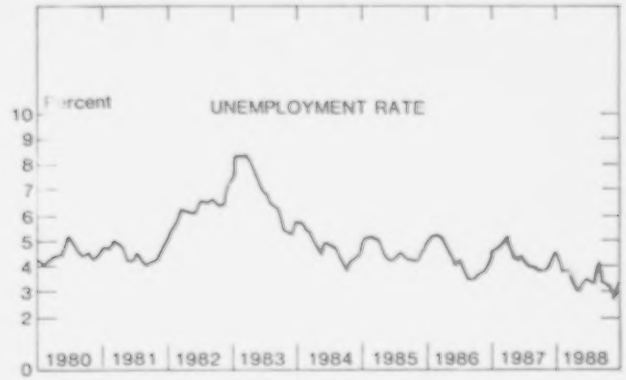
St. Cloud MSA	1980	1981	1982	1983	1984	1985	1986	1987	1988	Percent Change 1980-88
Total Nonfarm W&S	54,904	55,545	54,838	56,105	60,572	62,428	66,012	68,429	71,760	30.7
Total Mfg	10,747	10,617	10,161	10,378	10,857	10,821	11,444	11,884	13,080	21.7
Durables	6,623	6,439	5,694	5,753	6,033	6,120	6,437	6,691	7,377	11.4
Nondurables	4,124	4,178	4,468	4,625	4,825	4,702	5,006	5,193	5,702	38.3
Total Nonmfg	44,157	44,928	44,677	45,728	49,715	51,606	54,568	56,545	58,680	32.9
Const & Mining	3,010	3,217	2,761	2,593	2,909	3,205	3,421	3,565	3,445	14.5
Trans,Com,P.U.	3,515	3,455	3,430	3,477	3,687	3,636	3,482	3,401	3,633	3.4
Trade	14,785	14,922	15,275	15,953	17,147	18,240	19,945	21,082	21,421	44.9
Wholesale	2,527	2,591	2,729	2,763	3,002	3,038	3,191	3,365	3,280	29.8
Retail	12,259	12,331	12,546	13,190	14,125	15,202	16,754	17,717	18,141	48.0
Fin, Ins, R.E.	1,894	1,956	1,939	1,998	2,097	2,149	2,372	2,249	2,254	19.0
Services	9,734	10,269	10,427	10,963	12,453	12,871	13,460	14,441	15,427	58.5
Health	3,927	4,139	4,214	4,368	4,464	4,522	4,647	4,897	5,096	29.8
Other	5,807	6,130	6,213	6,595	7,989	8,349	8,813	9,544	10,331	77.9
Government	11,219	11,109	10,844	10,744	11,423	11,505	11,888	12,112	12,500	11.4

Rochester MSA	1980	1981	1982	1983	1984	1985	1986	1987	1988	Percent Change 1980-88
Total Nonfarm W&S	50,384	50,910	50,778	51,103	54,147	55,088	55,160	56,736	59,951	19.0
Total Mfg	10,212	10,451	10,056	10,105	10,932	11,230	10,777	10,638	11,026	8.0
Durables	8,515	8,685	8,284	8,318	9,150	9,394	9,000	8,829	9,178	7.8
Nondurables	1,697	1,766	1,772	1,787	1,782	1,836	1,777	1,809	1,848	8.9
Total Nonmfg	40,172	40,458	40,722	40,998	43,215	43,858	44,383	46,098	48,924	21.8
Const & Mining	2,049	1,650	1,620	1,654	1,779	1,903	1,778	1,856	2,072	1.1
Trans,Com,P.U.	1,962	1,933	1,919	1,932	1,885	1,861	1,697	1,692	1,742	-11.2
Trade	9,916	9,973	10,346	10,542	11,268	11,308	11,230	11,647	12,326	24.3
Wholesale	1,284	1,270	1,293	1,208	1,272	1,217	1,235	1,177	1,223	-4.7
Retail	8,632	8,703	9,054	9,334	9,996	10,091	9,995	10,469	11,102	28.6
Fin, Ins, R.E.	1,411	1,482	1,502	1,558	1,514	1,510	1,554	1,526	1,512	7.2
Services	18,885	19,738	20,171	20,347	21,586	21,704	22,364	23,525	25,138	33.1
Health	12,921	13,635	14,224	14,580	15,215	15,036	15,411	16,183	17,165	33.0
Other	5,964	6,103	5,947	5,768	6,371	6,668	6,953	7,342	7,953	33.4
Government	5,950	5,682	5,164	4,964	5,183	5,572	5,759	5,882	6,134	3.1

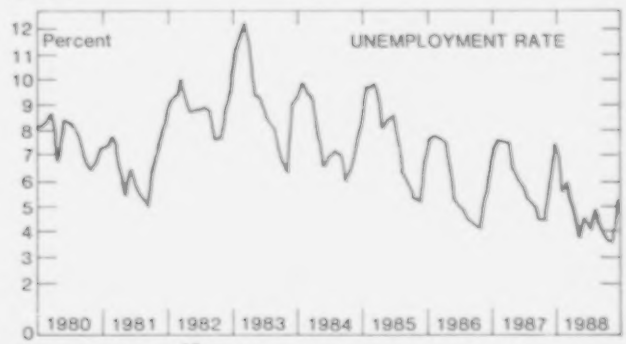
Duluth City	1980	1981	1982	1983	1984	1985	1986	1987	1988	Percent Change 1980-88
Total Nonfarm W&S	45,687	44,208	41,235	39,384	41,223	41,837	43,321	44,069	43,847	-4.0
Total Mfg	5,789	5,548	4,463	3,553	3,320	3,701	3,863	3,922	3,835	-33.8
Durables	2,533	2,561	2,114	1,753	1,742	1,756	1,831	1,596	1,531	-39.6
Nondurables	3,256	2,987	2,349	1,801	1,579	1,945	2,032	2,326	2,304	-29.2
Total Nonmfg	39,899	38,661	36,772	35,831	37,902	38,136	39,458	40,146	40,012	0.3
Const	1,620	1,268	1,060	915	1,015	1,200	1,743	2,249	1,375	-15.1
Trans,Com,P.U.	4,276	4,077	3,526	3,277	3,261	2,985	2,820	2,800	2,816	-34.1
Trade	12,076	11,329	10,687	10,464	10,833	10,762	10,869	11,022	11,143	-7.7
Wholesale	2,406	2,083	1,874	1,763	1,850	1,736	1,735	1,669	1,634	-32.1
Retail	9,670	9,246	8,813	8,701	8,982	9,026	9,134	9,353	9,509	-1.7
Fin, Ins, R.E.	1,884	1,831	1,736	1,723	1,701	1,783	1,765	1,811	1,839	-2.4
Services & Min	10,715	11,345	11,246	11,418	11,293	11,252	11,632	11,928	12,324	15.0
Health	4,585	4,991	5,088	5,166	5,074	4,950	5,091	5,246	5,553	21.1
Other & Mine	5,335	5,525	5,335	5,410	5,394	5,398	5,616	5,793	5,829	9.3
Government	9,328	8,811	8,519	8,035	9,800	10,153	10,629	10,337	10,516	12.7

Employment and Unemployment Rates for MN Metro Areas

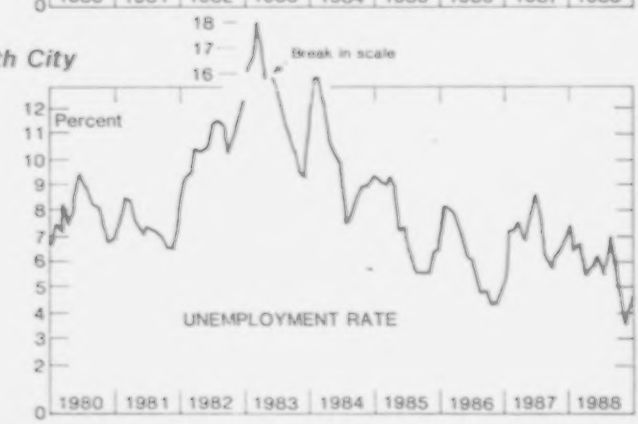
Minneapolis-St. Paul MSA



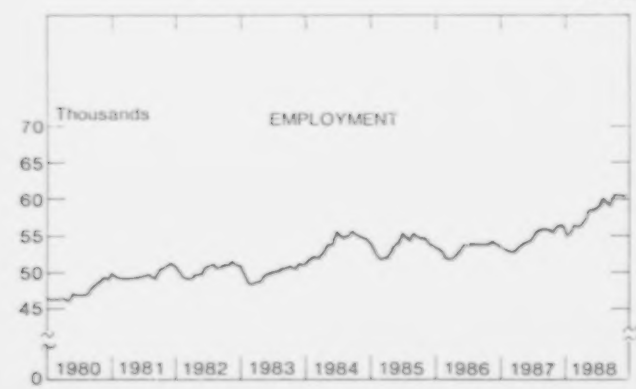
St. Cloud MSA

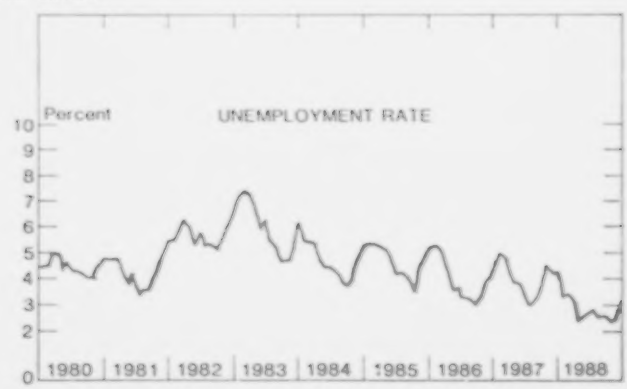


Duluth City



Rochester MSA





SUPPLY/DEMAND FOR SPECIFIC OCCUPATIONS, FEBRUARY 1989

By Mike Casey

	SHORTAGE OCCUPATIONS*	SURPLUS OCCUPATIONS
MINNESOTA:	nursing (RN,LPN, aides)# food service workers# retail sales clerks# clerical (experienced)# truck drivers (over the road)#	clerical (inexperienced)# factory workers# general laborers# construction laborers#
CENTRAL MINNESOTA:	nursing (RN, LPN, aides)	clerical (inexperienced)#
MINNEAPOLIS-ST. PAUL:	nursing (RN, LPN, aides)# clerical (experienced)# food service worker# retail sales clerks machinist (CNC)#	general laborers
NORTHEASTERN MINNESOTA:	nursing (RN, LPN, aides)# food service workers# plant electrician# clerical (experienced)#	clerical (inexperienced)# general laborers
NORTHWESTERN MINNESOTA:	retail sales clerks truck drivers (over the road) food service workers#	clerical (inexperienced)# construction laborers
SOUTHERN MINNESOTA:	nursing (RN, LPN, aides)# food service worker# retail sales clerks# truck drivers (over the road)#	clerical (inexperienced)# construction laborers#

* Shortage occupations are those that are difficult to fill or go unfilled due to the lack of qualified applicants. Surplus occupations are those in which the number of qualified applicants greatly exceeds the number of openings.

This occupation has been listed as a shortage or surplus occupation in at least two out of the last three quarters of the Review.

1988 Employment And Unemployment Annual Averages For Minnesota Counties And MSAs

AREA NAME	1988 EMP	1988 UNEMP	1988 UNEMP RT
TOTAL STATE	2233000	9400	4.0
Aitkin	4716	470	9.1
Becker	12616	882	6.5
Beltrami	15415	841	5.2
Big Stone	2824	145	4.9
Brown	13141	570	4.2
Carlton	11579	878	7.0
Cass	7876	735	8.5
Chippewa	6500	352	5.1
Clay	24423	934	3.7
Clearwater	3110	464	13.0
Cook	2535	146	5.4
Cottonwood	5967	338	5.4
Crow Wing	20673	1183	5.4
Dodge	7814	386	4.7
Douglas	14235	662	4.4
Faribault	7784	353	4.3
Fillmore	9364	509	5.2
Freeborn	16913	604	3.4
Goodhue	20079	752	3.6
Grant	2733	157	5.4
Houston	8845	371	4.0
Hubbard	6825	464	6.4
Itasca	16158	1314	7.5
Jackson	5040	302	5.7
Kanabec	5356	472	8.1
Kandiyohi	18781	834	4.3
Kittson	2320	208	8.2
Koochiching	7319	458	5.9
Lac Qui Parle	4053	141	3.4
Lake	3708	408	9.9
Lk of Woods	1813	86	4.5
Le Sueur	10522	689	6.1
Lincoln	3100	139	4.3
Lyon	12318	567	4.4
McLeod	17773	638	3.5
Mahnomen	2215	170	7.1
Marshall	4419	596	11.9
Martin	10821	599	5.2
Meeker	8199	571	6.5
Mille Lacs	9085	545	5.7
Morrison	13111	975	6.9
Mower	16407	634	3.7
Murray	4524	261	5.5
Nobles	10674	384	3.5
Norman	3412	234	6.4
Olmsted (Roch MSA)	59100	1700	2.8
Otter Tail	23547	1411	5.7
Pennington	6203	456	6.8
Pine	9234	777	7.8
Pipestone	5357	175	3.2
Polk	13802	993	6.7
Pope	4406	245	5.3
Red Lake	1366	231	14.5
Redwood	7477	295	3.8
Renville	8559	520	5.7
Rice	26944	1094	3.9
Rock	4455	138	3.0
Roseau	8255	367	4.3
St. Louis	82640	5466	6.2
Sibley	6325	346	5.2
Steele	15490	549	3.4
Stevens	4992	158	3.1
Swift	4666	248	5.0
Todd	10005	687	6.4
Traverse	2060	87	4.1
Wabasha	8385	399	4.5
Wadena	4711	293	5.9
Waseca	9096	313	3.3
Watonwan	5957	175	2.9
Wilkin	3175	155	4.7
Winona	26020	981	3.6
Yellow Medicine	5403	253	4.5
MPLSTP MSA	1339891	47354	3.4
St. Cloud MSA	90816	4462	4.7
Duluth	35671	2137	5.7

Ordinarily, this table would include a comparison with 1987 data. But because previous labor force data is being recalculated using the new methodology described in **Research Summaries** on the next page, new 1987 figures whould have become available about the time this table reached you. Anyone needing the revised data should contact Wayne Graner at (612) 296-3715.

RESEARCH SUMMARIES

By Bruce Steuernagel

Refiguring The Unemployment Figures

Much of the information in this article is based on a news release developed by the U.S. Department of Labor, Bureau of Labor Statistics. Beginning with data for January 1989 published in this issue of the Review, the Bureau of Labor Statistics plans to shift to a new method of calculating monthly employment and unemployment estimates for most States and the District of Columbia. To replace the current building-block method, the Research Office, in cooperation with the Bureau plans to begin using a regression model, known as the variable coefficient model, to produce more precise estimates and that automatically adjusts to structural changes in the economies of the various States. Nevertheless, users of monthly unemployment rates are likely to notice that the new methodology produces more pronounced month-to-month changes than did the former method.

Background

The Bureau of Labor Statistics is responsible for the procedures used to develop monthly civilian labor force estimates in all States, metropolitan areas, counties, and cities of 25,000 population or more. Labor force estimates for the Nation as a whole are produced directly from the Current Population Survey (CPS), a scientifically selected sample of households representative of the total population. In 11 large States, (California, Florida, Illinois, Massachusetts, Michigan, New Jersey, New York, North Carolina, Ohio, Pennsylvania, and Texas), the CPS sample sizes are large enough to produce reliable monthly estimates on a monthly and thus are used as the official employment and unemployment series in those States. For the remaining 39 States and the District of Columbia, the sample sizes are too small to support direct development of monthly employment and unemployment estimates. For these States, which are referred to as "nondirect-use States", the requirement for monthly labor force estimates has presented special estimation problems. Currently, labor force estimates for the nondirect-use States are prepared by first using a building-block approach to defining and estimating components of unemployment and employment insurance (UI) system and the Current Employment Statistics (CES) program covering nonagricultural payroll employment. Estimates for groups not adequately measured monthly are developed using historical or larger area relationships. Because they are based on data from UI programs which differ from State to State, unemployment estimates calculated by this method are not comparable across States. In order to ensure comparability across States and with the national measures--a requirement for purposes of analysis and equity in the distribution of Federal funds--the monthly estimates for each State are adjusted to State CPS levels using a 6-month moving average of CPS data. Once annual average CPS data are available, the monthly employment and unemployment estimates for the year are then adjusted to these benchmark numbers using a mathematical approach that distributes the difference between the CPS annual average and the average of the building-block estimates.

This methodology for developing monthly employment and unemployment estimates for the "nondirect-use States" has been deficient in a number of respects. The relatively small proportion of the total unemployed accounted for by UI claimants, and difficulties in estimating groups not covered by UI, cause the building-block estimates to significantly lower than CPS levels. The magnitude of the underestimation is such that building-block produced unemployment estimates may be less than half of the level recorded by the CPS.

While the adjustment to CPS using the moving average corrects for the significant underestimation, it introduces other problems into the estimates, since it affects the seasonality of the series. That is, the official monthly State estimates reflect neither the seasonality of the UI-based series nor that of the CPS. In addition, the method of benchmarking the series to the annual average results in discontinuities between the December benchmarked estimate and the January estimate prepared using the moving average.

New Method

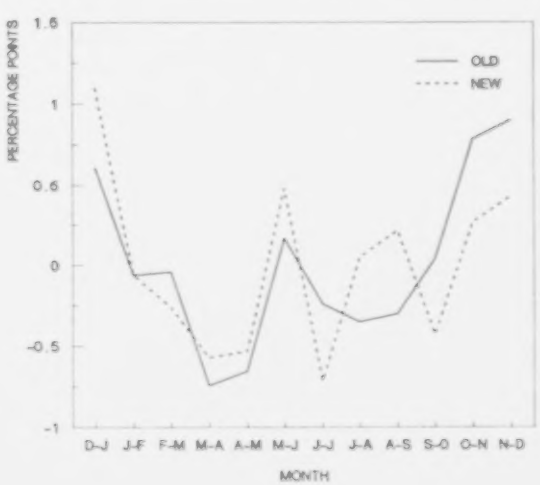
Given the problems with the procedures just described, BLS intends to replace the estimating methodology for nondirect-use States with a new method beginning with estimates for January 1989. The new method for the 39 States and the District of Columbia uses variable coefficient regression models developed by BLS and tested by the cooperating State employment security agencies. These dynamic time series regression models are able to use CPS, CES, and UI data more accurately and reliably. More than 10 years of data from these sources have been collected to build regression models that are resistant to large random sample errors in the CPS, yet flexible enough to reflect the individual features of each State's economy. The models for each State were developed using common rules and recognized statistical criteria. While based on past relationships, the models have a built-in self-tuning mechanism that allows them to reflect structural changes in a State's economy as the changes occur. Two estimating equations are used for each State, one for employment and one for the unemployment rate. The unemployment rate is modeled rather than the unemployment level because the rate is usually considered the more meaningful economic measure.

Although differences between the annual average of the model estimates and the CPS are very small, the model estimates will continue to be benchmarked to the CPS annual averages. Nevertheless, a new benchmarking method will be used which is consistent with the model-based estimation procedure and preserves the original monthly seasonal pattern of the model estimates.

A statistical analysis comparing the average monthly changes in the Minnesota unemployment rate for 1978-1987 using both the new and old methodologies showed that there is greater variance in the data calculated by the new methodology, and that in seven of the 12 months there was a statistically significant difference in the variance. This was expected since the old methodology included a six-month moving average and benchmark adjustments of monthly data to a CPS annual average. Both of these steps tend to produce a "smoother" pattern.

The following graph illustrates the differences referred to above.

COMPARISON OF AVERAGE MONTHLY CHANGES IN THE UNEMPLOYMENT RATE-NEW VS. OLD METHODOLOGIES



The current methodology used to calculate monthly labor force estimates for counties and major cities will not change. The labor force series for these areas will be revised and forced to the new State figures beginning with data for 1980.

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Important Minnesota Occupations by Industry (April 1988)

1986 Occupational Employment Statistics in Minnesota (January 1988)

1984 Occupational Employment Statistics in MInnesota (October 1985)

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1988 MInnesota Salaries by Industry and by Employer Size

Minnesota Employment and Wages by Economic Region and County (First-Fourth Quarters 1987)
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Report on Permanent Mass Layoffs and Plant Closings in Minnesota (July 1988)

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